

Welcome to STN International! Enter x:x

LOGINID:ssspta1611sxp

PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

\* \* \* \* \* \* \* \* \* Welcome to STN International \* \* \* \* \* \* \* \* \*

NEWS 1 Web Page URLs for STN Seminar Schedule - N. America  
NEWS 2 "Ask CAS" for self-help around the clock  
NEWS 3 SEP 09 CA/CAplus records now contain indexing from 1907 to the present  
NEWS 4 DEC 08 INPADOC: Legal Status data reloaded  
NEWS 5 SEP 29 DISSABS now available on STN  
NEWS 6 OCT 10 PCTFULL: Two new display fields added  
NEWS 7 OCT 21 BIOSIS file reloaded and enhanced  
NEWS 8 OCT 28 BIOSIS file segment of TOXCENTER reloaded and enhanced  
NEWS 9 NOV 24 MSDS-CCOHS file reloaded  
NEWS 10 DEC 08 CABA reloaded with left truncation  
NEWS 11 DEC 08 IMS file names changed  
NEWS 12 DEC 09 Experimental property data collected by CAS now available in REGISTRY  
NEWS 13 DEC 09 STN Entry Date available for display in REGISTRY and CA/CAplus  
NEWS 14 DEC 17 DGENE: Two new display fields added  
NEWS 15 DEC 18 BIOTECHNO no longer updated  
NEWS 16 DEC 19 CROPUS no longer updated; subscriber discount no longer available  
NEWS 17 DEC 22 Additional INPI reactions and pre-1907 documents added to CAS databases  
NEWS 18 DEC 22 IFIPAT/IFIUDB/IFICDB reloaded with new data and search fields  
NEWS 19 DEC 22 ABI-INFORM now available on STN  
NEWS 20 JAN 27 Source of Registration (SR) information in REGISTRY updated and searchable  
NEWS 21 JAN 27 A new search aid, the Company Name Thesaurus, available in CA/CAplus  
NEWS 22 FEB 05 German (DE) application and patent publication number format changes  
NEWS 23 MAR 03 MEDLINE and LMEDLINE reloaded  
NEWS 24 MAR 03 MEDLINE file segment of TOXCENTER reloaded  
NEWS 25 MAR 03 FRANCEPAT now available on STN  
  
NEWS EXPRESS MARCH 5 CURRENT WINDOWS VERSION IS V7.00A, CURRENT MACINTOSH VERSION IS V6.0b(ENG) AND V6.0Jb(JP), AND CURRENT DISCOVER FILE IS DATED 3 MARCH 2004  
NEWS HOURS STN Operating Hours Plus Help Desk Availability  
NEWS INTER General Internet Information  
NEWS LOGIN Welcome Banner and News Items  
NEWS PHONE Direct Dial and Telecommunication Network Access to STN  
NEWS WWW CAS World Wide Web Site (general information)

Enter NEWS followed by the item number or name to see news on that specific topic.

All use of STN is subject to the provisions of the STN Customer agreement. Please note that this agreement limits use to scientific research. Use for software development or design or implementation of commercial gateways or other similar uses is prohibited and may result in loss of user privileges and other penalties.

FILE 'HOME' ENTERED AT 09:54:26 ON 13 MAR 2004

FILE 'REGISTRY' ENTERED AT 09:54:35 ON 13 MAR 2004  
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.  
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.  
COPYRIGHT (C) 2004 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 12 MAR 2004 HIGHEST RN 662722-88-5  
DICTIONARY FILE UPDATES: 12 MAR 2004 HIGHEST RN 662722-88-5

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 6, 2004

Please note that search-term pricing does apply when conducting SmartSELECT searches.

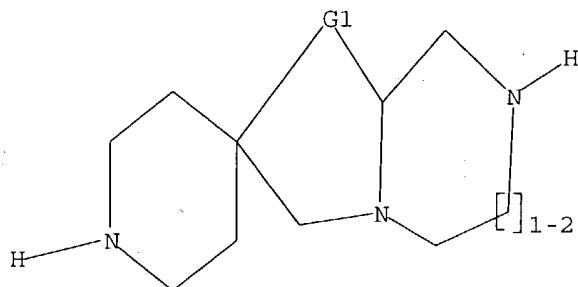
Crossover limits have been increased. See **HELP CROSSOVER** for details.

Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at:  
<http://www.cas.org/ONLINE/DBSS/registryss.html>

=>  
Uploading c:\program files\stnexp\queries\10026606.12

## L1 STRUCTURE UPLOADED

=> d 11  
L1 HAS NO ANSWERS  
L1 STR



G1 O,S,SO2,NH

G2 H,O,S

Structure attributes must be viewed using STN Express query preparation.

```
=> s l1 sss full
FULL SEARCH INITIATED 09:54:59 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 1402 TO ITERATE
```

100.0% PROCESSED 1402 ITERATIONS 2 ANSWERS  
SEARCH TIME: 00.00.01

L2 2 SEA SSS FUL L1

=> file marpat		SINCE FILE	TOTAL
COST IN U.S. DOLLARS		ENTRY	SESSION
FULL ESTIMATED COST		155.42	155.63

FILE 'MARPAT' ENTERED AT 09:55:06 ON 13 MAR 2004  
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.  
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.  
COPYRIGHT (C) 2004 American Chemical Society (ACS)

FILE CONTENT: 1988-PRESENT (VOL 140 ISS 10) (20040307/ED)

MOST RECENT CITATIONS FOR PATENTS FROM FIVE MAJOR ISSUING AGENCIES  
(COVERAGE TO THESE DATES IS NOT COMPLETE):

US	6683216	27 JAN 2004
DE	10317487	12 FEB 2004
EP	1388563	11 FEB 2004
JP	2004047131	12 FEB 2004
WO	2004011964	05 FEB 2004

Structure search limits have been raised. See HELP SLIMIT for the new,  
higher limits.

```
=> s l1 sss full
FULL SEARCH INITIATED 09:55:13 FILE 'MARPAT'
FULL SCREEN SEARCH COMPLETED - 188320 TO ITERATE
```

2.6% PROCESSED 4928 ITERATIONS 0 ANSWERS

10026606.1

Page 4

5.2% PROCESSED	9830 ITERATIONS	0 ANSWERS
9.6% PROCESSED	17988 ITERATIONS	0 ANSWERS
12.3% PROCESSED	23074 ITERATIONS	0 ANSWERS
14.7% PROCESSED	27736 ITERATIONS	0 ANSWERS
19.0% PROCESSED	35811 ITERATIONS	0 ANSWERS
21.6% PROCESSED	40690 ITERATIONS	0 ANSWERS
25.4% PROCESSED	47753 ITERATIONS	0 ANSWERS
28.0% PROCESSED	52663 ITERATIONS	0 ANSWERS
29.5% PROCESSED	55638 ITERATIONS	0 ANSWERS
30.6% PROCESSED	57544 ITERATIONS	0 ANSWERS
31.3% PROCESSED	58946 ITERATIONS	0 ANSWERS
31.6% PROCESSED	59582 ITERATIONS	0 ANSWERS
31.9% PROCESSED	60000 ITERATIONS	0 ANSWERS
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)		
SEARCH TIME: 00.04.00		

FULL FILE PROJECTIONS: ONLINE \*\*INCOMPLETE\*\*  
BATCH \*\*INCOMPLETE\*\*  
PROJECTED ITERATIONS: 188320 TO 188320  
PROJECTED ANSWERS: 0 TO 0

L3 0 SEA SSS FUL L1

=> log y			
COST IN U.S. DOLLARS		SINCE FILE ENTRY	TOTAL
FULL ESTIMATED COST		111.94	SESSION 267.57

STN INTERNATIONAL LOGOFF AT 09:59:31 ON 13 MAR 2004

Welcome to STN International! Enter x:x

LOGINID:sssptal611sxp

PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

\* \* \* \* \* \* \* \* \* Welcome to STN International \* \* \* \* \* \* \* \* \*

NEWS 1 Web Page URLs for STN Seminar Schedule - N. America  
NEWS 2 "Ask CAS" for self-help around the clock  
NEWS 3 SEP 09 CA/CAplus records now contain indexing from 1907 to the present  
NEWS 4 DEC 08 INPADOC: Legal Status data reloaded  
NEWS 5 SEP 29 DISSABS now available on STN  
NEWS 6 OCT 10 PCTFULL: Two new display fields added  
NEWS 7 OCT 21 BIOSIS file reloaded and enhanced  
NEWS 8 OCT 28 BIOSIS file segment of TOXCENTER reloaded and enhanced  
NEWS 9 NOV 24 MSDS-CCOHS file reloaded  
NEWS 10 DEC 08 CABA reloaded with left truncation  
NEWS 11 DEC 08 IMS file names changed  
NEWS 12 DEC 09 Experimental property data collected by CAS now available in REGISTRY  
NEWS 13 DEC 09 STN Entry Date available for display in REGISTRY and CA/CAplus  
NEWS 14 DEC 17 DGENE: Two new display fields added  
NEWS 15 DEC 18 BIOTECHNO no longer updated  
NEWS 16 DEC 19 CROPUS no longer updated; subscriber discount no longer available  
NEWS 17 DEC 22 Additional INPI reactions and pre-1907 documents added to CAS databases  
NEWS 18 DEC 22 IFIPAT/IFIUDB/IFICDB reloaded with new data and search fields  
NEWS 19 DEC 22 ABI-INFORM now available on STN  
NEWS 20 JAN 27 Source of Registration (SR) information in REGISTRY updated and searchable  
NEWS 21 JAN 27 A new search aid, the Company Name Thesaurus, available in CA/CAplus  
NEWS 22 FEB 05 German (DE) application and patent publication number format changes  
NEWS 23 MAR 03 MEDLINE and LMEDLINE reloaded  
NEWS 24 MAR 03 MEDLINE file segment of TOXCENTER reloaded  
NEWS 25 MAR 03 FRANCEPAT now available on STN  
  
NEWS EXPRESS MARCH 5 CURRENT WINDOWS VERSION IS V7.00A, CURRENT MACINTOSH VERSION IS V6.0b(ENG) AND V6.0Jb(JP), AND CURRENT DISCOVER FILE IS DATED 3 MARCH 2004  
NEWS HOURS STN Operating Hours Plus Help Desk Availability  
NEWS INTER General Internet Information  
NEWS LOGIN Welcome Banner and News Items  
NEWS PHONE Direct Dial and Telecommunication Network Access to STN  
NEWS WWW CAS World Wide Web Site (general information)

Enter NEWS followed by the item number or name to see news on that specific topic.

All use of STN is subject to the provisions of the STN Customer agreement. Please note that this agreement limits use to scientific research. Use for software development or design or implementation of commercial gateways or other similar uses is prohibited and may result in loss of user privileges and other penalties.

FILE 'HOME' ENTERED AT 10:04:11 ON 13 MAR 2004

FILE 'REGISTRY' ENTERED AT 10:04:30 ON 13 MAR 2004  
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.  
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.  
COPYRIGHT (C) 2004 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 12 MAR 2004 HIGHEST RN 662722-88-5  
DICTIONARY FILE UPDATES: 12 MAR 2004 HIGHEST RN 662722-88-5

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 6, 2004

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at:  
<http://www.cas.org/ONLINE/DBSS/registryss.html>

=> Uploading c:\program files\stnexp\queries\10026606.13

## L1 STRUCTURE UPLOADED

=> s 11 sss full  
FULL SEARCH INITIATED 10:04:55 FILE 'REGISTRY'  
FULL SCREEN SEARCH COMPLETED - 1146 TO ITERATE

100.0% PROCESSED . . . 1146 ITERATIONS . . . . . 21 ANSWERS  
SEARCH TIME: 00.00.06

L2 21 SEA SSS FUL L1

FILE 'MARPAT' ENTERED AT 10:05:08 ON 13 MAR 2004

USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.  
 PLEASE SEE "HELP USAGETERMS" FOR DETAILS.  
 COPYRIGHT (C) 2004 American Chemical Society (ACS)

FILE CONTENT: 1988-PRESENT (VOL 140 ISS 10) (20040307/ED)

MOST RECENT CITATIONS FOR PATENTS FROM FIVE MAJOR ISSUING AGENCIES  
 (COVERAGE TO THESE DATES IS NOT COMPLETE):

US	6683216	27 JAN 2004
DE	10317487	12 FEB 2004
EP	1388563	11 FEB 2004
JP	2004047131	12 FEB 2004
WO	2004011964	05 FEB 2004

Structure search limits have been raised. See HELP SLIMIT for the new, higher limits.

=> s 11 sss full  
 STRUCTURE TOO LARGE - SEARCH ENDED  
 A structure in your query is too large. You may delete attributes or atoms to reduce the size of the structure and try again.

=> file caplus		SINCE FILE	TOTAL
COST IN U.S. DOLLARS		ENTRY	SESSION
FULL ESTIMATED COST		0.42	156.05

FILE 'CAPLUS' ENTERED AT 10:05:25 ON 13 MAR 2004  
 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.  
 PLEASE SEE "HELP USAGETERMS" FOR DETAILS.  
 COPYRIGHT (C) 2004 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 13 Mar 2004 VOL 140 ISS 12  
 FILE LAST UPDATED: 12 Mar 2004 (20040312/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s 12  
 L3            2 L2

=> d 12 fbib hit str abs total  
 YOU HAVE REQUESTED DATA FROM FILE 'REGISTRY' - CONTINUE? (Y)/N:n

=> d 13 fbib hitstr abs total

L3 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2004 ACS on STN  
 AN 2002:521746 CAPLUS  
 DN 137:93770  
 TI Preparation of tricyclic spiro compounds and cholesterol biosynthesis inhibitors containing them as the active ingredient  
 IN Nishida, Hidemitsu; Mukaihira, Takafumi  
 PA Mochida Pharmaceutical Co., Ltd., Japan  
 SO PCT Int. Appl., 311 pp.  
 CODEN: PIXXD2

DT Patent  
 LA Japanese  
 FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002053568	A1	20020711	WO 2001-JP11656	20011228
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			JP 2000-399998 A	20001228
EP	1346994	A1	20030924	EP 2001-272922	20011228
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR			JP 2000-399998 A	20001228
				WO 2001-JP11656W	20011228

#### PATENT FAMILY INFORMATION:

FAN 2001:31501

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2001002397	A1	20010111	WO 2000-JP4374	20000630
	W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			JP 1999-222883 A	19990630
EP	1191028	A1	20020327	EP 2000-940912	20000630
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO			JP 1999-222883 A	19990630
BR	2000012093	A	20020716	WO 2000-JP4374 W	20000630
ZA	2001010558	A	20020912	BR 2000-12093	20000630
				JP 1999-222883 A	19990630
				WO 2000-JP4374 W	20000630
				ZA 2001-10558	20011221
				JP 1999-222883 A	19990630

US 2003045520

A1 20030306

US 2001-26606 20011227

JP 1999-222883 A 19990630

WO 2000-JP4374 A220000630

JP 2000-399998 A 20001228

NO 2001006402

A 20020227

NO 2001-6402 20011228

JP 1999-222883 A 19990630

WO 2000-JP4374 W 20000630

OS MARPAT 137:93770

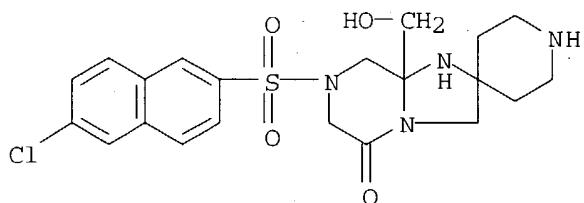
IT 318988-28-2P 441790-26-7P 441790-30-3P  
 441790-31-4P 441790-36-9P 441790-38-1P  
 441790-44-9P 441790-47-2P 441790-57-4P  
 441790-81-4P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of tricyclic spiro compds. as oxidosqualene cyclase inhibitors and cholesterol biosynthesis inhibitors for preventives and therapeutic agents)

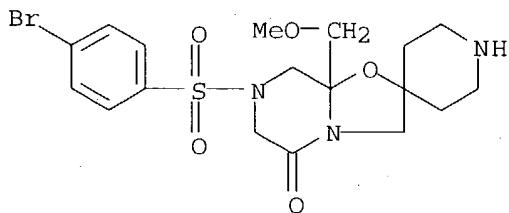
RN 318988-28-2 CAPLUS

CN Spiro[imidazo[1,2-a]pyrazine-2(3H),4'-piperidin]-5(1H)-one,  
 7-[(6-chloro-2-naphthalenyl)sulfonyl]tetrahydro-8a-(hydroxymethyl)- (9CI)  
 (CA INDEX NAME)



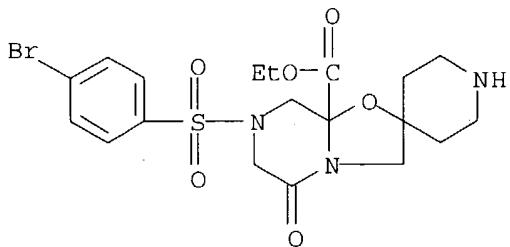
RN 441790-26-7 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
 7-[(4-bromophenyl)sulfonyl]tetrahydro-8a-(methoxymethyl)- (9CI) (CA INDEX NAME)

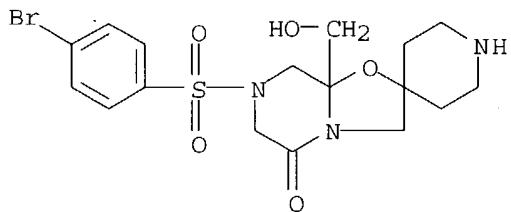


RN 441790-30-3 CAPLUS

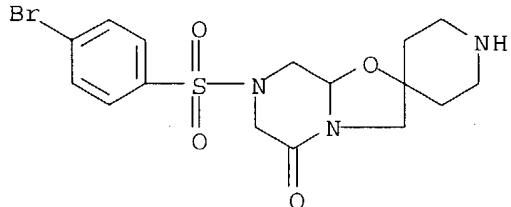
CN Spiro[8aH-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidine]-8a-carboxylic acid,  
 7-[(4-bromophenyl)sulfonyl]tetrahydro-5-oxo-, ethyl ester (9CI) (CA INDEX NAME)



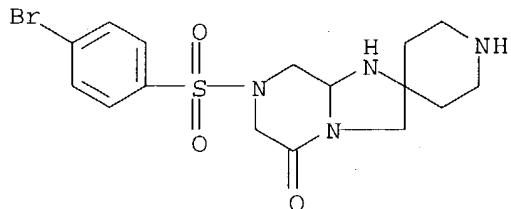
RN 441790-31-4 CAPLUS  
 CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
 7-[(4-bromophenyl)sulfonyl]tetrahydro-8a-(hydroxymethyl)- (9CI) (CA INDEX NAME)



RN 441790-36-9 CAPLUS  
 CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
 7-[(4-bromophenyl)sulfonyl]tetrahydro- (9CI) (CA INDEX NAME)

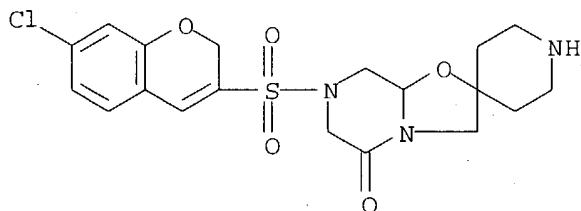


RN 441790-38-1 CAPLUS  
 CN Spiro[imidazo[1,2-a]pyrazine-2(3H),4'-piperidin]-5(1H)-one,  
 7-[(4-bromophenyl)sulfonyl]tetrahydro- (9CI) (CA INDEX NAME)

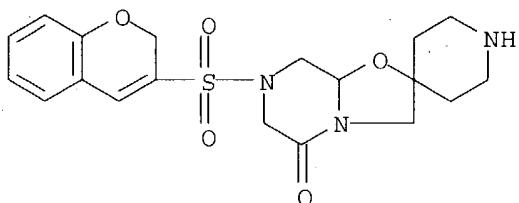


RN 441790-44-9 CAPLUS

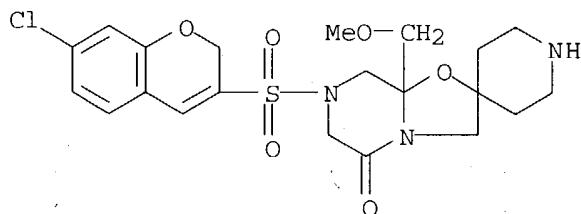
CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
 7-[(7-chloro-2H-1-benzopyran-3-yl)sulfonyl]tetrahydro- (9CI) (CA INDEX  
 NAME)



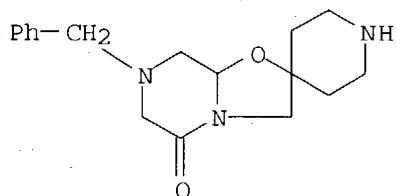
RN 441790-47-2 CAPLUS  
 CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
 7-(2H-1-benzopyran-3-ylsulfonyl)tetrahydro- (9CI) (CA INDEX NAME)



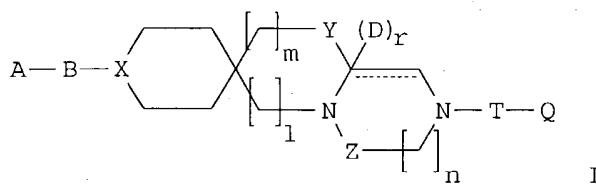
RN 441790-57-4 CAPLUS  
 CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
 7-[(7-chloro-2H-1-benzopyran-3-yl)sulfonyl]tetrahydro-8a-(methoxymethyl)-  
 (9CI) (CA INDEX NAME)



RN 441790-81-4 CAPLUS  
 CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
 tetrahydro-7-(phenylmethyl)- (9CI) (CA INDEX NAME)



GI



AB Disclosed are orally administrable cholesterol biosynthesis inhibitors and oxidosqualene cyclase inhibitors which contain as the active ingredients tricyclic spiro compds., i.e. 1,4-diaza-7-oxaspiro[bicyclo[4.3.0]nonane-8,4'-piperidine]-2-one and 1,4,7-triazaspiro[bicyclo[4.3.0]nonane-8,4'-piperidine]-2-one derivs. represented by the general formula (I) or salts thereof: [wherein A = H, (un)substituted 5- or 6-membered (un)saturated heterocyclic or carbocyclic group, (un)substituted NH<sub>2</sub> or imidoyl; B = a single bond, carbonyl, S(O)<sub>x</sub> (x = 0,1,2), C=2 alkylene; D = H, COR<sub>5</sub> (R<sub>5</sub> = H, substituent), (un)substituted C1-6 alkyl; X = N, CH optionally substituted by A'-B' group (A' and B' are selected from groups defined in A and B, resp.); Y = O, S(O)<sub>y</sub> (y = 0,1,2), NH; Z = CH<sub>2</sub>, CO, C(:S); T = SO<sub>2</sub>, CO, S(O)<sub>z</sub> (z = 0,1,2), a single bond, (un)substituted C1-2 alkylene; Q = (un)substituted hydrocarbon or heterocyclic group; m, n, p = 0,1, or 2, provided that m and p are not simultaneously 0; q = 0,1; each of 3 rings cong. X, Y, and Z is optionally substituted; the solid line accompanied by a dotted line represents a single bond or a double bond when q is 0]. These compds. inhibit oxidosqualene cyclase and in turn the conversion of 2,3-oxidosqualene into cholesterol and thereby exhibit potent serum cholesterol lowering effect and are useful for the prevention and/or treatment of cholesterol biosynthesis and oxidosqualene cyclase-related diseases such as hypercholesterolemia, hyperlipidemia, arteriosclerotic disease, myocardial infarction, angina pectoris, cerebral infarction, cerebral hemorrhage, aortic aneurysm, peripheral artery obstruction, nephrosclerosis, optic nerve atrophy, hydrocephalus, and fungal infection. Thus, Et<sub>3</sub>N and 4-bromobenzenesulfonyl chloride were added to a son. of 1,4-diaza-4-(benzyloxycarbonyl)-7-oxaspiro[bicyclo[4.3.0]nonane-8,4'-piperidine]-2-one in CH<sub>2</sub>Cl<sub>2</sub> and stirred at room temperature for 10 min to give 1,4-diaza-4-(benzyloxycarbonyl)-1'-(4-bromobenzenesulfonyl)-7-oxaspiro[bicyclo[4.3.0]nonane-8,4'-piperidine]-2-one which was dissolved in MeCN, treated with trimethylsilyl iodide under ice-cooling, and stirred for 30 min under ice-cooling to give 1,4-diaza-1'-(4-bromobenzenesulfonyl)-7-oxaspiro[bicyclo[4.3.0]nonane-8,4'-piperidine]-2-one (II). II at 0.3 µg/mL in vitro inhibited the biosynthesis of cholesterol in mouse fibroblast L929 cells by 66%.

RE.CNT 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2004 ACS on STN  
 AN 2001:31501 CAPLUS  
 DN 134:100887  
 TI Preparation of tricyclic compounds having spiro-piperidine as inhibitors of blood coagulation factor X (FXa) and anticoagulants  
 IN Nishida, Hidemitsu; Saitoh, Fumihiro; Harada, Kousuke; Shiromizu, Ikuya  
 PA Mochida Pharmaceutical Co., Ltd., Japan  
 SO PCT Int. Appl., 305 pp.  
 CODEN: PIXXD2

DT Patent  
 LA Japanese  
 FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2001002397	A1	20010111	WO 2000-JP4374	20000630
	W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG	JP 1999-222883 A 19990630
EP	1191028	A1	20020327	EP 2000-940912	20000630
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				JP 1999-222883 A 19990630
BR	2000012093	A	20020716	BR 2000-12093	20000630
				JP 1999-222883 A 19990630	WO 2000-JP4374 W 20000630
ZA	2001010558	A	20020912	ZA 2001-10558	20011221
				JP 1999-222883 A 19990630	WO 2000-JP4374 W 20000630
US	2003045520	A1	20030306	US 2001-26606	20011227
				JP 1999-222883 A 19990630	JP 1999-222883 A 19990630
				WO 2000-JP4374 A220000630	
				JP 2000-399998 A 20001228	
NO	2001006402	A	20020227	NO 2001-6402	20011228
				JP 1999-222883 A 19990630	JP 1999-222883 A 19990630
				WO 2000-JP4374 W 20000630	

## PATENT FAMILY INFORMATION:

FAN 2002:521746

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002053568	A1	20020711	WO 2001-JP11656	20011228
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG	JP 2000-399998 A 20001228
EP	1346994	A1	20030924	EP 2001-272922	20011228
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR			JP 2000-399998 A 20001228	WO 2001-JP11656W 20011228

OS MARPAT 134:100887

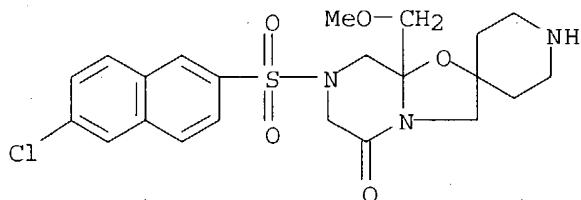
IT 318986-34-4P 318986-44-6P 318986-57-1P  
 318986-66-2P 318986-72-0P 318986-89-9P  
 318987-11-0P 318987-50-7P 318987-59-6P  
 318988-19-1P 318988-24-8P 318988-28-2P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of tricyclic compds. having spiro-piperidine as inhibitors of blood coagulation factor X (FXa) and anticoagulants or as pharmacophores in mol. designing Fxa inhibitors)

RN 318986-34-4 CAPLUS

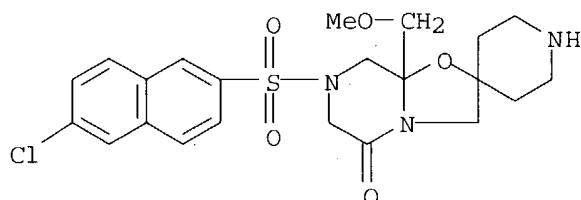
CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
7-[(6-chloro-2-naphthalenyl)sulfonyl]tetrahydro-8a-(methoxymethyl)-,  
monohydrochloride (9CI) (CA INDEX NAME)



● HCl

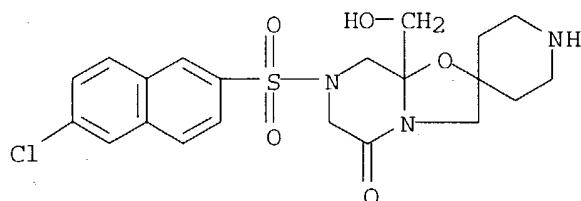
RN 318986-44-6 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
7-[(6-chloro-2-naphthalenyl)sulfonyl]tetrahydro-8a-(methoxymethyl)- (9CI)  
(CA INDEX NAME)



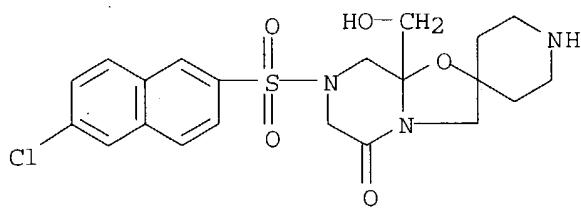
RN 318986-57-1 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
7-[(6-chloro-2-naphthalenyl)sulfonyl]tetrahydro-8a-(hydroxymethyl)- (9CI)  
(CA INDEX NAME)



RN 318986-66-2 CAPLUS

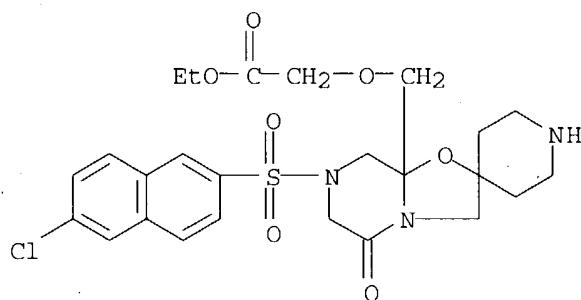
CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
7-[(6-chloro-2-naphthalenyl)sulfonyl]tetrahydro-8a-(hydroxymethyl)-,  
monohydrochloride (9CI) (CA INDEX NAME)



● HCl

RN 318986-72-0 CAPLUS

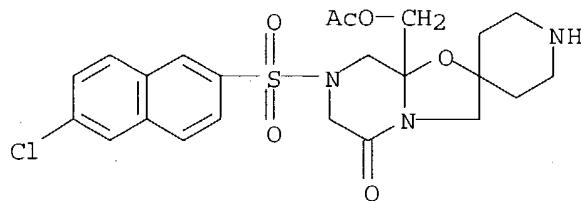
CN Acetic acid, [ [7-[(6-chloro-2-naphthalenyl)sulfonyl]tetrahydro-5-oxospiro[8aH-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-8a-yl)methoxy]-, ethyl ester, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

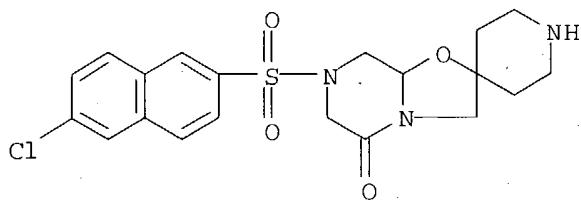
RN 318986-89-9 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
8a-[(acetyloxy)methyl]-7-[(6-chloro-2-naphthalenyl)sulfonyl]tetrahydro-  
(9CI) (CA INDEX NAME)



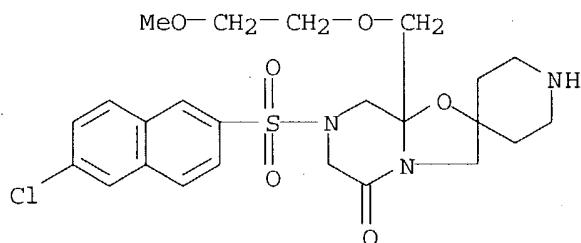
RN 318987-11-0 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
7-[(6-chloro-2-naphthalenyl)sulfonyl]tetrahydro-, monohydrochloride (9CI)  
(CA INDEX NAME)

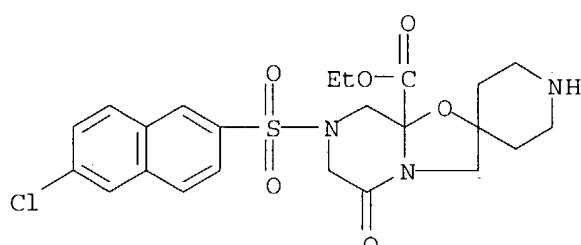


● HCl

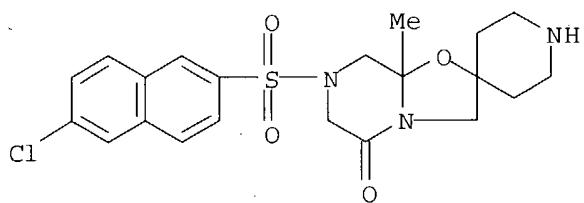
RN 318987-50-7 CAPLUS  
 CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
 7-[(6-chloro-2-naphthalenyl)sulfonyl]tetrahydro-8a-[(2-methoxyethoxy)methyl]- (9CI) (CA INDEX NAME)



RN 318987-59-6 CAPLUS  
 CN Spiro[8aH-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidine]-8a-carboxylic acid,  
 7-[(6-chloro-2-naphthalenyl)sulfonyl]tetrahydro-5-oxo-, ethyl ester (9CI)  
 (CA INDEX NAME)

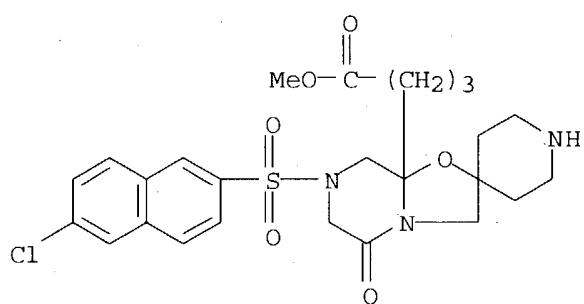


RN 318988-19-1 CAPLUS  
 CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
 7-[(6-chloro-2-naphthalenyl)sulfonyl]tetrahydro-8a-methyl- (9CI) (CA  
 INDEX NAME)



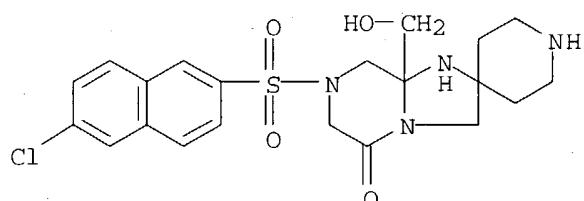
RN 318988-24-8 CAPLUS

CN Spiro[8aH-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidine]-8a-butanoic acid,  
7-[(6-chloro-2-naphthalenyl)sulfonyl]tetrahydro-5-oxo-, methyl ester (9CI)  
(CA INDEX NAME)

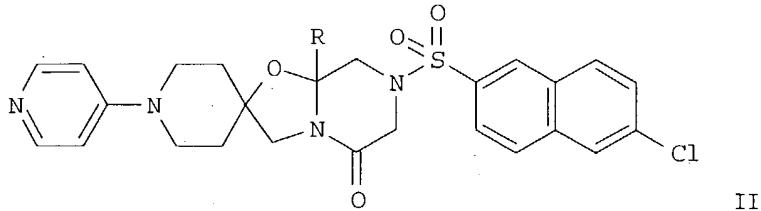
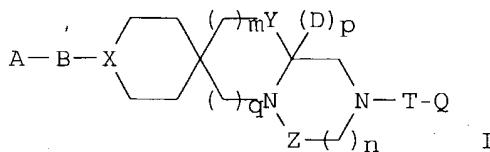


RN 318988-28-2 CAPLUS

CN Spiro[imidazo[1,2-a]pyrazine-2(3H),4'-piperidin]-5(1H)-one,  
7-[(6-chloro-2-naphthalenyl)sulfonyl]tetrahydro-8a-(hydroxymethyl)- (9CI)  
(CA INDEX NAME)



GI



AB Aromatic compds. having cyclic amino which are represented by general formula (I) or salts thereof [wherein A = H, (un)substituted (un)saturated 5- to 6-membered cyclic hydrocarbyl or heterocyclyl, (un)substituted NH<sub>2</sub>, (un)substituted imidoyl; B = single bond, CO, SO, (un)substituted C1-2 alkylene; D = H, (un)substituted CHO, (un)substituted C1-6 alkyl; X = N, (un)substituted methine; Y = O, S(O)<sub>y</sub> (wherein y = 0,1,2), (un)substituted NH; Z = CH<sub>2</sub>, CO, C(S); T = S(O)<sub>z</sub> (wherein z = 0,1,2), CO, (un)substituted C1-2 alkylene; Q = (un)substituted hydrocarbyl or heterocyclyl; m, n, q = 0, 1,2; p = 0,1; the three rings containing X, Y, or Z is optionally substituted; the bond represented by a dotted and solid line in the ring containing Z is a single bond or a double bond when p = 0] are prepared. These compds. are useful as drugs, in particular, activated blood coagulation factor X inhibitors for the prevention and treatment of diseases caused by thrombus or embolism, influenza virus infection, or periodontosis, exert a potent anticoagulation effect, and can be orally administered. A pharmacophore derived from the above compds. is also useful in mol. designing Fxa inhibitors. Thus, 4-(aminomethyl)-1-benzyl-4-hydroxypiperidine was cyclocondensed with Et 2-[N-(3-acetoxy-2-oxopropan-1-yl)-N-(6-chloronaphthalene-2-ylsulfonyl)amino]acetate under reflux in the presence of p-MeC<sub>6</sub>H<sub>4</sub>SO<sub>3</sub>H.H<sub>2</sub>O using a Dean-Stark trap to give 6-acetoxy-1,4-diaza-1'-benzyl-4-(6-chloronaphthalene-2-ylsulfonyl)-7-oxaspiro[bicyclo[4.3.0]nonan-8,4'-piperidine]-2-one which underwent saponification

with a mixture of aqueous NaOH and MeOH, methylation by di-Me sulfate, and debenzylation with 1-chloroethyl chloroformate to give 1,4-diaza-4-(6-chloronaphthalene-2-ylsulfonyl)-6-(methoxymethyl)-7-oxaspiro[bicyclo[4.3.0]nonan-8,4'-piperidine]-2-one hydrochloride. The latter compound was condensed with 4-chloropyridine hydrochloride in the presence of diisopropylethylamine in 2-ethoxyethanol under reflux for 2 h to give 1,4-diaza-4-(6-chloronaphthalene-2-ylsulfonyl)-6-(methoxymethyl)-7-oxo-1'-(4-pyridyl)-spiro[bicyclo[4.3.0]nonan-8,4'-piperidine]-2-one (II; R = CH<sub>2</sub>OMe). II (R = CH<sub>2</sub>OMe) and II (R = CO<sub>2</sub>Et) showed IC<sub>50</sub> of 0.0032 and 0.0015 μM, resp., against Fxa.

RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> log y  
COST IN U.S. DOLLARS

SINCE FILE TOTAL

10026606.1 3

Page 15

FULL ESTIMATED COST	ENTRY 23.43	SESSION 179.48
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL
CA SUBSCRIBER PRICE	-1.39	SESSION -1.39

STN INTERNATIONAL LOGOFF AT 10:07:03 ON 13 MAR 2004

Welcome to STN International! Enter x:x

LOGINID:ssspta1611sxp

PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

\* \* \* \* \* \* \* \* \* \* \* \* \* \* \* \* Welcome to STN International \* \* \* \* \* \* \* \* \* \* \* \* \* \* \*

NEWS 1 Web Page URLs for STN Seminar Schedule - N. America  
NEWS 2 "Ask CAS" for self-help around the clock  
NEWS 3 SEP 09 CA/CAplus records now contain indexing from 1907 to the present  
NEWS 4 DEC 08 INPADOC: Legal Status data reloaded  
NEWS 5 SEP 29 DISSABS now available on STN  
NEWS 6 OCT 10 PCTFULL: Two new display fields added  
NEWS 7 OCT 21 BIOSIS file reloaded and enhanced  
NEWS 8 OCT 28 BIOSIS file segment of TOXCENTER reloaded and enhanced  
NEWS 9 NOV 24 MSDS-CCOHS file reloaded  
NEWS 10 DEC 08 CABA reloaded with left truncation  
NEWS 11 DEC 08 IMS file names changed  
NEWS 12 DEC 09 Experimental property data collected by CAS now available in REGISTRY  
NEWS 13 DEC 09 STN Entry Date available for display in REGISTRY and CA/CAplus  
NEWS 14 DEC 17 DGENE: Two new display fields added  
NEWS 15 DEC 18 BIOTECHNO no longer updated  
NEWS 16 DEC 19 CROPU no longer updated; subscriber discount no longer available  
NEWS 17 DEC 22 Additional INPI reactions and pre-1907 documents added to CAS databases  
NEWS 18 DEC 22 IFIPAT/IFIUDB/IFICDB reloaded with new data and search fields  
NEWS 19 DEC 22 ABI-INFORM now available on STN  
NEWS 20 JAN 27 Source of Registration (SR) information in REGISTRY updated and searchable  
NEWS 21 JAN 27 A new search aid, the Company Name Thesaurus, available in CA/CAplus  
NEWS 22 FEB 05 German (DE) application and patent publication number format changes  
NEWS 23 MAR 03 MEDLINE and LMEDLINE reloaded  
NEWS 24 MAR 03 MEDLINE file segment of TOXCENTER reloaded  
NEWS 25 MAR 03 FRANCEPAT now available on STN  
  
NEWS EXPRESS MARCH 5 CURRENT WINDOWS VERSION IS V7.00A, CURRENT MACINTOSH VERSION IS V6.0b(ENG) AND V6.0Jb(JP), AND CURRENT DISCOVER FILE IS DATED 3 MARCH 2004  
NEWS HOURS STN Operating Hours Plus Help Desk Availability  
NEWS INTER General Internet Information  
NEWS LOGIN Welcome Banner and News Items  
NEWS PHONE Direct Dial and Telecommunication Network Access to STN  
NEWS WWW CAS World Wide Web Site (general information)

Enter NEWS followed by the item number or name to see news on that specific topic.

All use of STN is subject to the provisions of the STN Customer agreement. Please note that this agreement limits use to scientific research. Use for software development or design or implementation of commercial gateways or other similar uses is prohibited and may result in loss of user privileges and other penalties.

FILE 'HOME' ENTERED AT 09:11:49 ON 13 MAR 2004

FILE 'REGISTRY' ENTERED AT 09:11:59 ON 13 MAR 2004  
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.  
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.  
COPYRIGHT (C) 2004 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 12 MAR 2004 HIGHEST RN 662722-88-5  
DICTIONARY FILE UPDATES: 12 MAR 2004 HIGHEST RN 662722-88-5

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 6, 2004

Please note that search-term pricing does apply when conducting SmartSELECT searches.

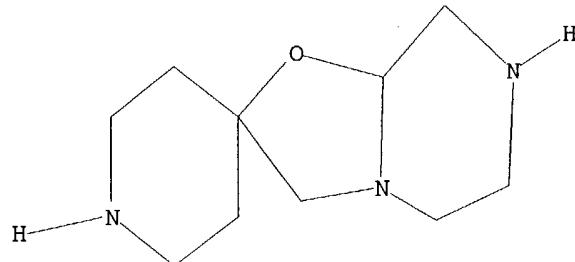
Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at:  
<http://www.cas.org/ONLINE/DBSS/registryss.html>

```
=> Uploading c:\program files\stnexp\queries\10026606.1
```

## L1 STRUCTURE UPLOADED

=> d 11  
L1 HAS NO ANSWERS  
L1 STR



Structure attributes must be viewed using STN Express query preparation.

```
=> s 11 sss full
FULL SEARCH INITIATED 09:12:40 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 522 TO ITERATE
```

```
100.0% PROCESSED 522 ITERATIONS 2 ANSWERS
SEARCH TIME: 00.00.01
```

L2 2 SEA SSS FUL L1

```
=> file marpar
'MARPAR' IS NOT A VALID FILE NAME
SESSION CONTINUES IN FILE 'REGISTRY'
Enter "HELP FILE NAMES" at an arrow prompt (=>) for a list of files
that are available. If you have requested multiple files, you can
specify a corrected file name or you can enter "IGNORE" to continue
accessing the remaining file names entered.
```

```
=> s 12 sss full
FULL SEARCH INITIATED 09:12:53 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 522 TO ITERATE
```

```
100.0% PROCESSED 522 ITERATIONS 2 ANSWERS
SEARCH TIME: 00.00.01
```

L3 2 SEA SSS FUL L1

```
=> file caold;d
COST IN U.S. DOLLARS SINCE FILE TOTAL
                           ENTRY SESSION
FULL ESTIMATED COST           310.84   311.05
```

```
FILE 'CAOLD' ENTERED AT 09:12:58 ON 13 MAR 2004
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2004 AMERICAN CHEMICAL SOCIETY (ACS)
```

```
FILE COVERS 1907-1966
FILE LAST UPDATED: 01 May 1997 (19970501/UP)
```

This file contains CAS Registry Numbers for easy and accurate substance identification. Title keywords, authors, patent assignees, and patent information, e.g., patent numbers, are now searchable from 1907-1966. TIFF images of CA abstracts printed between 1907-1966 are available in the PAGE display formats.

This file supports REGISTRY for direct browsing and searching of all substance data from the REGISTRY file. Enter HELP FIRST for more information.

YOU HAVE REQUESTED DATA FROM FILE 'REGISTRY' - CONTINUE? (Y)/N:n

```
=> file caold
COST IN U.S. DOLLARS          SINCE FILE      TOTAL
                                ENTRY           SESSION
FULL ESTIMATED COST          0.42            311.47
```

FILE 'CAOLD' ENTERED AT 09:13:07 ON 13 MAR 2004  
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.  
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.  
COPYRIGHT (C) 2004 AMERICAN CHEMICAL SOCIETY (ACS)

FILE COVERS 1907-1966  
FILE LAST UPDATED: 01 May 1997 (19970501/UP)

This file contains CAS Registry Numbers for easy and accurate substance identification. Title keywords, authors, patent assignees, and patent information, e.g., patent numbers, are now searchable from 1907-1966. TIFF images of CA abstracts printed between 1907-1966 are available in the PAGE display formats.

This file supports REGISTRY for direct browsing and searching of all substance data from the REGISTRY file. Enter HELP FIRST for more information.

```
=> s 11 sss full
REGISTRY INITIATED
Substance data SEARCH and crossover from CAS REGISTRY in progress...
Use DISPLAY HITSTR (or FHITSTR) to directly view retrieved structures.
```

FULL SEARCH INITIATED 09:13:15 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 522 TO ITERATE

100.0% PROCESSED 522 ITERATIONS 2 ANSWERS
SEARCH TIME: 00.00.01

L4 2 SEA SSS FUL L1

L5 0 L4

```
=> file CAREACT
'CAREACT' IS NOT A VALID FILE NAME
SESSION CONTINUES IN FILE 'CAOLD'
Enter "HELP FILE NAMES" at an arrow prompt (=>) for a list of files
that are available. If you have requested multiple files, you can
specify a corrected file name or you can enter "IGNORE" to continue
accessing the remaining file names entered.
```

```
=> ignore
IGNORE IS NOT A RECOGNIZED COMMAND
The previous command name entered was not recognized by the system.
```

For a list of commands available to you in the current file, enter "HELP COMMANDS" at an arrow prompt (=>).

=> "IGNORE"

"IGNORE" IS NOT A RECOGNIZED COMMAND

The previous command name entered was not recognized by the system.  
For a list of commands available to you in the current file, enter "HELP COMMANDS" at an arrow prompt (=>).

=> file caplus

COST IN U.S. DOLLARS

SINCE FILE ENTRY	TOTAL SESSION
---------------------	------------------

FULL ESTIMATED COST

0.42 467.73

FILE 'CAPLUS' ENTERED AT 09:14:06 ON 13 MAR 2004

USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

COPYRIGHT (C) 2004 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 13 Mar 2004 VOL 140 ISS 12

FILE LAST UPDATED: 12 Mar 2004 (20040312/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> d his

(FILE 'HOME' ENTERED AT 09:11:49 ON 13 MAR 2004)

FILE 'REGISTRY' ENTERED AT 09:11:59 ON 13 MAR 2004

L1 STRUCTURE UPLOADED  
L2 2 S L1 SSS FULL  
L3 2 S L2 SSS FULL

FILE 'CAOLD' ENTERED AT 09:12:58 ON 13 MAR 2004

FILE 'CAOLD' ENTERED AT 09:13:07 ON 13 MAR 2004  
S L1

FILE 'REGISTRY' ENTERED AT 09:13:15 ON 13 MAR 2004

L4 2 S L1 SSS FULL

FILE 'CAOLD' ENTERED AT 09:13:16 ON 13 MAR 2004

L5 0 S L4 SSS FULL

FILE 'CAPLUS' ENTERED AT 09:14:06 ON 13 MAR 2004

=> s 12  
 L6 1 L2

=> s 13  
 L7 1 L3

=> d 16 fbib hitstr abs total

L6 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2004 ACS on STN  
 AN 2001:31501 CAPLUS  
 DN 134:100887  
 TI Preparation of tricyclic compounds having spiro-piperidine as inhibitors of blood coagulation factor X (FXa) and anticoagulants  
 IN Nishida, Hidemitsu; Saitoh, Fumihiro; Harada, Kousuke; Shiromizu, Ikuya  
 PA Mochida Pharmaceutical Co., Ltd., Japan  
 SO PCT Int. Appl., 305 pp.  
 CODEN: PIXXD2

DT Patent  
 LA Japanese

FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2001002397	A1	20010111	WO 2000-JP4374	20000630
	W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG		JP 1999-222883 A 19990630		
EP	1191028	A1	20020327	EP 2000-940912	20000630
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO			JP 1999-222883 A 19990630	
BR	2000012093	A	20020716	WO 2000-JP4374 W	20000630
				BR 2000-12093	20000630
				JP 1999-222883 A 19990630	
				WO 2000-JP4374 W	20000630
ZA	2001010558	A	20020912	ZA 2001-10558	20011221
				JP 1999-222883 A 19990630	
US	2003045520	A1	20030306	US 2001-26606	20011227
				JP 1999-222883 A 19990630	
				WO 2000-JP4374 A220000630	
				JP 2000-399998 A 20001228	
NO	2001006402	A	20020227	NO 2001-6402	20011228
				JP 1999-222883 A 19990630	
				WO 2000-JP4374 W	20000630

#### PATENT FAMILY INFORMATION:

FAN 2002:521746

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002053568	A1	20020711	WO 2001-JP11656	20011228

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM  
 RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

JP 2000-399998 A 20001228

EP 1346994 A1 20030924 EP 2001-272922 20011228

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR

JP 2000-399998 A 20001228

WO 2001-JP11656W 20011228

OS MARPAT 134:100887

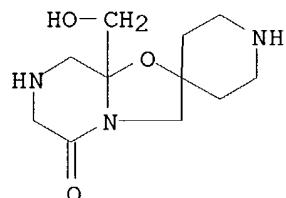
IT **318988-48-6P**, 1,4-Diaza-6-(hydroxymethyl)-7-oxaspiro[bicyclo[4.3.0]nonane-8,4'-piperidine]-2-one **318988-58-8P**

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of tricyclic compds. having spiro-piperidine as inhibitors of blood coagulation factor X (FXa) and anticoagulants or as pharmacophores in mol. designing FXa inhibitors)

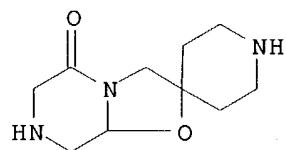
RN 318988-48-6 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one, tetrahydro-8a-(hydroxymethyl)- (9CI) (CA INDEX NAME)

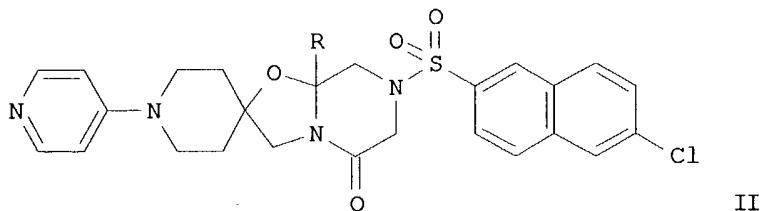
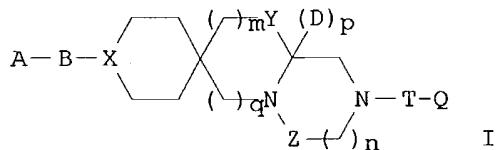


RN 318988-58-8 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one, tetrahydro- (9CI) (CA INDEX NAME)



GI



AB Aromatic compds. having cyclic amino which are represented by general formula (I) or salts thereof [wherein A = H, (un)substituted (un)saturated 5- to 6-membered cyclic hydrocarbyl or heterocyclyl, (un)substituted NH<sub>2</sub>, (un)substituted imidoyl; B = single bond, CO, SO, (un)substituted C<sub>1-2</sub> alkylene; D = H, (un)substituted CHO, (un)substituted C<sub>1-6</sub> alkyl; X = N, (un)substituted methine; Y = O, S(O)<sub>y</sub> (wherein y = 0,1,2), (un)substituted NH; Z = CH<sub>2</sub>, CO, C(S); T = S(O)<sub>z</sub> (wherein z = 0,1,2), CO, (un)substituted C<sub>1-2</sub> alkylene; Q = (un)substituted hydrocarbyl or heterocyclyl; m, n, q = 0, 1,2; p = 0,1; the three rings containing X, Y, or Z is optionally substituted; the bond represented by a dotted and solid line in the ring containing Z is a single bond or a double bond when p = 0] are prepared. These compds. are useful as drugs, in particular, activated blood coagulation factor X inhibitors for the prevention and treatment of diseases caused by thrombus or embolism, influenza virus infection, or periodontosis, exert a potent anticoagulation effect, and can be orally administered. A pharmacophore derived from the above compds. is also useful in mol. designing Fxa inhibitors. Thus, 4-(aminomethyl)-1-benzyl-4-hydroxypiperidine was cyclocondensed with Et 2-[N-(3-acetoxy-2-oxopropan-1-yl)-N-(6-chloronaphthalene-2-ylsulfonyl)amino]acetate under reflux in the presence of p-MeC<sub>6</sub>H<sub>4</sub>SO<sub>3</sub>H.H<sub>2</sub>O using a Dean-Stark trap to give 6-acetoxy-1,4-diaza-1'-benzyl-4-(6-chloronaphthalene-2-ylsulfonyl)-7-oxaspiro[bicyclo[4.3.0]nonan-8,4'-piperidine]-2-one which underwent saponification

with a mixture of aqueous NaOH and MeOH, methylation by di-Me sulfate, and debenzylation with 1-chloroethyl chloroformate to give 1,4-diaza-4-(6-chloronaphthalene-2-ylsulfonyl)-6-(methoxymethyl)-7-oxaspiro[bicyclo[4.3.0]nonan-8,4'-piperidine]-2-one hydrochloride. The latter compound was condensed with 4-chloropyridine hydrochloride in the presence of diisopropylethylamine in 2-ethoxyethanol under reflux for 2 h to give 1,4-diaza-4-(6-chloronaphthalene-2-ylsulfonyl)-6-(methoxymethyl)-7-oxo-1'-(4-pyridyl)-spiro[bicyclo[4.3.0]nonan-8,4'-piperidine]-2-one (II; R = CH<sub>2</sub>OMe). II (R = CH<sub>2</sub>OMe) and II (R = CO<sub>2</sub>Et) showed IC<sub>50</sub> of 0.0032 and 0.0015 μM, resp., against Fxa.

RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

```
=> d 17 fbib hitstr abs total
```

L7 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2004 ACS on STN  
 AN 2001:31501 CAPLUS  
 DN 134:100887  
 TI Preparation of tricyclic compounds having spiro-piperidine as inhibitors of blood coagulation factor X (FXa) and anticoagulants  
 IN Nishida, Hidemitsu; Saitoh, Fumihiro; Harada, Kousuke; Shiromizu, Ikuya  
 PA Mochida Pharmaceutical Co., Ltd., Japan  
 SO PCT Int. Appl., 305 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA Japanese  
 FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2001002397	A1	20010111	WO 2000-JP4374	20000630
	W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG		JP 1999-222883 A	19990630	
EP	1191028	A1	20020327	EP 2000-940912	20000630
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO			JP 1999-222883 A	19990630
				WO 2000-JP4374	W 20000630
BR	2000012093	A	20020716	BR 2000-12093	20000630
				JP 1999-222883 A	19990630
				WO 2000-JP4374	W 20000630
ZA	2001010558	A	20020912	ZA 2001-10558	20011221
				JP 1999-222883 A	19990630
US	2003045520	A1	20030306	US 2001-26606	20011227
				JP 1999-222883 A	19990630
				WO 2000-JP4374	A220000630
				JP 2000-399998 A	20001228
NO	2001006402	A	20020227	NO 2001-6402	20011228
				JP 1999-222883 A	19990630
				WO 2000-JP4374	W 20000630

## PATENT FAMILY INFORMATION:

FAN 2002:521746

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002053568	A1	20020711	WO 2001-JP11656	20011228
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				

EP 1346994 A1 20030924 JP 2000-399998 A 20001228  
 EP 2001-272922 20011228  
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
 IE, SI, LT, LV, FI, RO, MK, CY, AL, TR  
 JP 2000-399998 A 20001228  
 WO 2001-JP11656W 20011228

OS MARPAT 134:100887

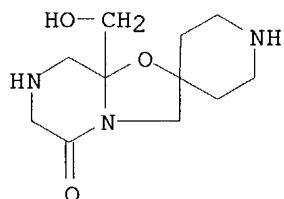
IT **318988-48-6P**, 1,4-Diaza-6-(hydroxymethyl)-7-oxaspiro[bicyclo[4.3.0]nonane-8,4'-piperidine]-2-one **318988-58-8P**

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of tricyclic compds. having spiro-piperidine as inhibitors of blood coagulation factor X (FXa) and anticoagulants or as pharmacophores in mol. designing Fxa inhibitors)

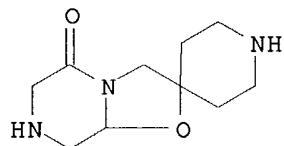
RN 318988-48-6 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one, tetrahydro-8a-(hydroxymethyl)- (9CI) (CA INDEX NAME)

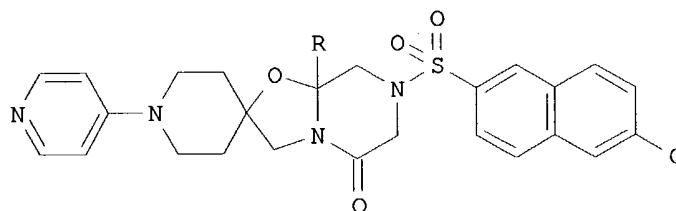
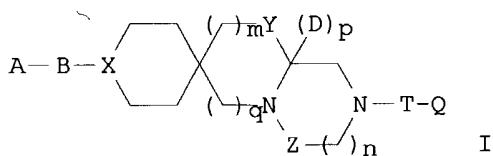


RN 318988-58-8 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one, tetrahydro- (9CI) (CA INDEX NAME)



GI



AB Aromatic compds. having cyclic amino which are represented by general formula (I) or salts thereof [wherein A = H, (un)substituted (un)saturated 5- to 6-membered cyclic hydrocarbyl or heterocyclyl, (un)substituted NH<sub>2</sub>, (un)substituted imidoYL; B = single bond, CO, SO, (un)substituted C1-2 alkylene; D = H, (un)substituted CHO, (un)substituted C1-6 alkyl; X = N, (un)substituted methine; Y = O, S(O)<sub>y</sub> (wherein y = 0,1,2), (un)substituted NH; Z = CH<sub>2</sub>, CO, C(S); T = S(O)<sub>z</sub> (wherein z = 0,1,2), CO, (un)substituted C1-2 alkylene; Q = (un)substituted hydrocarbyl or heterocyclyl; m, n, q = 0, 1,2; p = 0,1; the three rings containing X, Y, or Z is optionally substituted; the bond represented by a dotted and solid line in the ring containing Z is a single bond or a double bond when p = 0] are prepared. These compds. are useful as drugs, in particular, activated blood coagulation factor X inhibitors for the prevention and treatment of diseases caused by thrombus or embolism, influenza virus infection, or periodontosis, exert a potent anticoagulation effect, and can be orally administered. A pharmacophore derived from the above compds. is also useful in mol. designing Fxa inhibitors. Thus, 4-(aminomethyl)-1-benzyl-4-hydroxypiperidine was cyclocondensed with Et 2-[N-(3-acetoxy-2-oxopropan-1-yl)-N-(6-chloronaphthalene-2-ylsulfonyl)amino]acetate under reflux in the presence of p-MeC<sub>6</sub>H<sub>4</sub>SO<sub>3</sub>H.H<sub>2</sub>O using a Dean-Stark trap to give 6-acetoxy-1,4-diaza-1'-benzyl-4-(6-chloronaphthalene-2-ylsulfonyl)-7-oxaspiro[bicyclo[4.3.0]nonan-8,4'-piperidine]-2-one which underwent saponification

with a mixture of aqueous NaOH and MeOH, methylation by di-Me sulfate, and debenzylation with 1-chloroethyl chloroformate to give 1,4-diaza-4-(6-chloronaphthalene-2-ylsulfonyl)-6-(methoxymethyl)-7-oxaspiro[bicyclo[4.3.0]nonan-8,4'-piperidine]-2-one hydrochloride. The latter compound was condensed with 4-chloropyridine hydrochloride in the presence of diisopropylethylamine in 2-ethoxyethanol under reflux for 2 h to give 1,4-diaza-4-(6-chloronaphthalene-2-ylsulfonyl)-6-(methoxymethyl)-7-oxo-1'-(4-pyridyl)-spiro[bicyclo[4.3.0]nonan-8,4'-piperidine]-2-one (II; R = CH<sub>2</sub>OMe). II (R = CH<sub>2</sub>OMe) and II (R = CO<sub>2</sub>Et) showed IC<sub>50</sub> of 0.0032 and 0.0015 μM, resp., against Fxa.

RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> s oxaspiro and bicyclo

L8 50 OXASPIRO AND BICYCLO

=> s 18 and nonan and 2-one  
 L9 3 L8 AND NONAN AND 2-ONE

=> d 19 fbib hitstr abs total

L9 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2004 ACS on STN  
 AN 2001:31501 CAPLUS  
 DN 134:100887  
 TI Preparation of tricyclic compounds having spiro-piperidine as inhibitors of blood coagulation factor X (FXa) and anticoagulants  
 IN Nishida, Hidemitsu; Saitoh, Fumihiro; Harada, Kousuke; Shiromizu, Ikuya  
 PA Mochida Pharmaceutical Co., Ltd., Japan  
 SO PCT Int. Appl., 305 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA Japanese  
 FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2001002397	A1	20010111	WO 2000-JP4374	20000630
	W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			JP 1999-222883 A	19990630
EP	1191028	A1	20020327	EP 2000-940912	20000630
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO			JP 1999-222883 A	19990630
BR	2000012093	A	20020716	JP 1999-222883 A	19990630
				WO 2000-JP4374 W	20000630
ZA	2001010558	A	20020912	BR 2000-12093	20000630
				JP 1999-222883 A	19990630
US	2003045520	A1	20030306	WO 2000-JP4374 W	20000630
				ZA 2001-10558	20011221
NO	2001006402	A	20020227	JP 1999-222883 A	19990630
				US 2001-26606	20011227
				JP 1999-222883 A	19990630
				WO 2000-JP4374 A220000630	
				JP 2000-399998 A	20001228
				NO 2001-6402	20011228
				JP 1999-222883 A	19990630
				WO 2000-JP4374 W	20000630

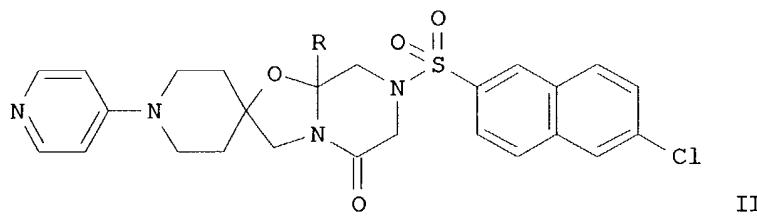
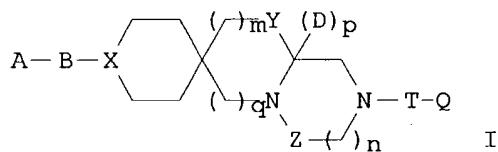
## PATENT FAMILY INFORMATION:

FAN 2002:521746

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002053568	A1	20020711	WO 2001-JP11656	20011228
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,				

LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL,  
 PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG,  
 US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM  
 RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH,  
 CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR,  
 BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG  
 JP 2000-39998 A 20001228  
 EP 1346994 A1 20030924 EP 2001-272922 20011228  
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
 IE, SI, LT, LV, FI, RO, MK, CY, AL, TR  
 JP 2000-39998 A 20001228  
 WO 2001-JP11656W 20011228

OS MARPAT 134:100887  
 GI

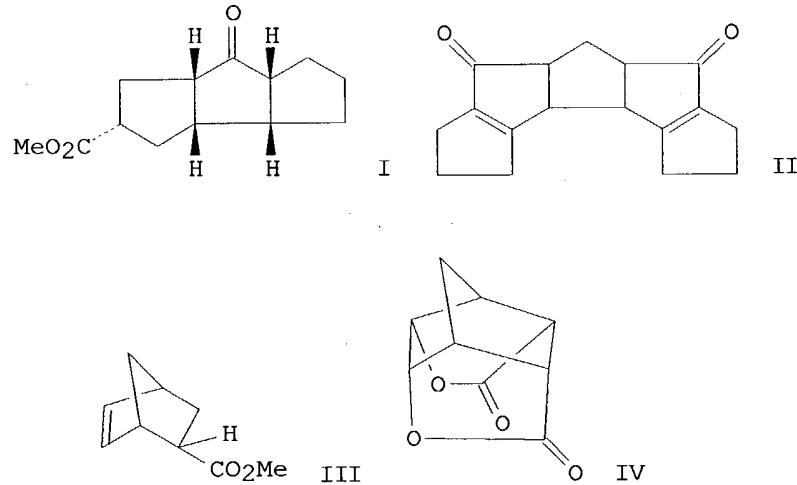


AB Aromatic compds. having cyclic amino which are represented by general formula (I) or salts thereof [wherein A = H, (un)substituted (un)saturated 5- to 6-membered cyclic hydrocarbyl or heterocyclyl, (un)substituted NH<sub>2</sub>, (un)substituted imidoYL; B = single bond, CO, SO, (un)substituted C1-2 alkylene; D = H, (un)substituted CHO, (un)substituted C1-6 alkyl; X = N, (un)substituted methine; Y = O, S(O)<sub>y</sub> (wherein y = 0,1,2), (un)substituted NH; Z = CH<sub>2</sub>, CO, C(S); T = S(O)<sub>z</sub> (wherein z = 0,1,2), CO, (un)substituted C1-2 alkylene; Q = (un)substituted hydrocarbyl or heterocyclyl; m, n, q = 0, 1,2; p = 0,1; the three rings containing X, Y, or Z is optionally substituted; the bond represented by a dotted and solid line in the ring containing Z is a single bond or a double bond when p = 0] are prepared. These compds. are useful as drugs, in particular, activated blood coagulation factor X inhibitors for the prevention and treatment of diseases caused by thrombus or embolism, influenza virus infection, or periodontosis, exert a potent anticoagulation effect, and can be orally administered. A pharmacophore derived from the above compds. is also useful in mol. designing Fxa inhibitors. Thus, 4-(aminomethyl)-1-benzyl-4-hydroxypiperidine was cyclocondensed with Et 2-[N-(3-acetoxy-2-oxopropan-1-yl)-N-(6-chloronaphthalene-2-ylsulfonyl)amino]acetate under reflux in the presence of p-MeC<sub>6</sub>H<sub>4</sub>SO<sub>3</sub>H.H<sub>2</sub>O using a Dean-Stark trap to give 6-acetoxy-1,4-diaza-1'-benzyl-4-(6-chloronaphthalene-2-ylsulfonyl)-7-oxaspiro[bicyclo[4.3.0]nonan-8,4'-piperidine]-

**2-one** which underwent saponification with a mixture of aqueous NaOH and MeOH, methylation by di-Me sulfate, and debenzylation with 1-chloroethyl chloroformate to give 1,4-diaza-4-(6-chloronaphthalene-2-ylsulfonyl)-6-(methoxymethyl)-7-**oxaspiro[bicyclo[4.3.0]nonan-8,4'-piperidine]-2-one**. The latter compound was condensed with 4-chloropyridine hydrochloride. The latter compound was condensed with 4-chloropyridine hydrochloride in the presence of diisopropylethylamine in 2-ethoxyethanol under reflux for 2 h to give 1,4-diaza-4-(6-chloronaphthalene-2-ylsulfonyl)-6-(methoxymethyl)-7-oxo-1'-(4-pyridyl)-spiro**[bicyclo[4.3.0]nonan-8,4'-piperidine]-2-one** (II; R = CH<sub>2</sub>OMe). II (R = CH<sub>2</sub>OMe) and II (R = CO<sub>2</sub>Et) showed IC<sub>50</sub> of 0.0032 and 0.0015 μM, resp., against Fxa.

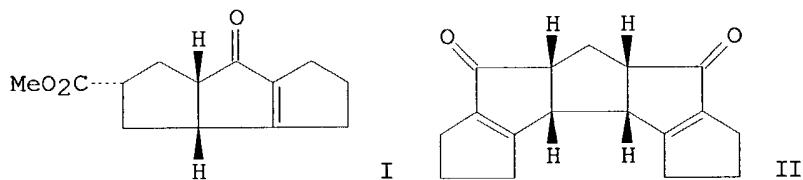
RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2004 ACS on STN  
 AN 1992:531398 CAPLUS  
 DN 117:131398  
 TI A general methodology for the synthesis of linearly fused polyquinanes.  
 AU Murthy, Y. V. Suryanarayana; Pillai, C. Narayana  
 CS Dep. Chem., Indian Inst. Technol., Madras, 600 036, India  
 SO Tetrahedron (1992), 48(25), 5331-46  
 CODEN: TETRAB; ISSN: 0040-4020  
 DT Journal  
 LA English  
 OS CASREACT 117:131398  
 GI



AB A methodol. involving a combination of spiro-annulation by the action of 1,4-dibromomagnesiobutane on succinic acid derivs. followed by cyclization of the spirolactone using P2O5-CH<sub>3</sub>SO<sub>3</sub>H reagent was developed for the synthesis of polyquinanes. By using **bicyclo[2.2.1]heptanecarboxylic acids** I and II as the precursors for the spirolactones, triquinane III and pentaquinane IV were synthesized.

L9 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2004 ACS on STN  
 AN 1991:61590 CAPLUS  
 DN 114:61590  
 TI A new route to linearly fused polyquinanes  
 AU Murty, Narayana Y. V. S.; Billai, C. Narayana  
 CS Dep. Chem., Indian Inst. Technol., Madras, 600 036, India  
 SO Tetrahedron Letters (1990), 31(42), 6067-70  
 CODEN: TELEAY; ISSN: 0040-4039  
 DT Journal  
 LA English  
 OS CASREACT 114:61590  
 GI



AB Syntheses of the triquinane I and the C17-pentaquinane II are reported starting from bicyclo[2.2.1]heptane derivs. utilizing di-Grignard species as key reagents.

=> d his

(FILE 'HOME' ENTERED AT 09:11:49 ON 13 MAR 2004)

FILE 'REGISTRY' ENTERED AT 09:11:59 ON 13 MAR 2004

L1                                   STRUCTURE UPLOADED  
 L2                                   2 S L1 SSS FULL  
 L3                                   2 S L2 SSS FULL

FILE 'CAOLD' ENTERED AT 09:12:58 ON 13 MAR 2004

FILE 'CAOLD' ENTERED AT 09:13:07 ON 13 MAR 2004  
 S L1

L4                                   FILE 'REGISTRY' ENTERED AT 09:13:15 ON 13 MAR 2004  
 2 S L1 SSS FULL

L5                                   FILE 'CAOLD' ENTERED AT 09:13:16 ON 13 MAR 2004  
 0 S L4 SSS FULL

L6                                   FILE 'CAPLUS' ENTERED AT 09:14:06 ON 13 MAR 2004  
 1 S L2  
 L7                                   1 S L3  
 L8                                   50 S OXASPIRO AND BICYCLO  
 L9                                   3 S L8 AND NONAN AND 2-ONE

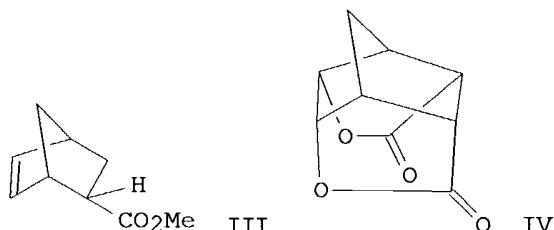
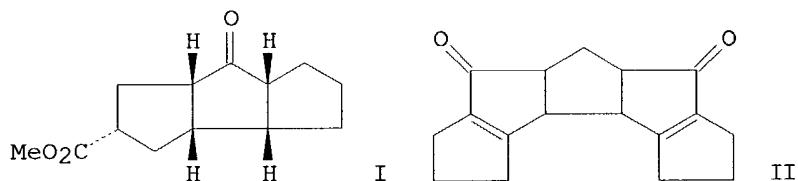
=> s l8 and decan

L10                                 5 L8 AND DECAN

=> s l10 and one  
 L11 5 L10 AND ONE

=> d l11 fbib hitstr abs total

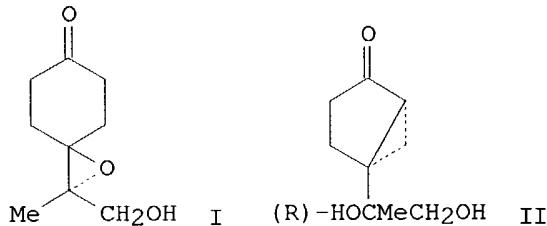
L11 ANSWER 1 OF 5 CAPLUS COPYRIGHT 2004 ACS on STN  
 AN 1992:531398 CAPLUS  
 DN 117:131398  
 TI A general methodology for the synthesis of linearly fused polyquinanes.  
 AU Murthy, Y. V. Suryanarayana; Pillai, C. Narayana  
 CS Dep. Chem., Indian Inst. Technol., Madras, 600 036, India  
 SO Tetrahedron (1992), 48(25), 5331-46  
 CODEN: TETRAB; ISSN: 0040-4020  
 DT Journal  
 LA English  
 OS CASREACT 117:131398  
 GI



AB A methodol. involving a combination of spiro-annulation by the action of 1,4-dibromomagnesiobutane on succinic acid derivs. followed by cyclization of the spirolactone using P2O5-CH3SO3H reagent was developed for the synthesis of polyquinanes. By using **bicyclo** [2.2.1]heptanecarboxylic acids I and II as the precursors for the spirolactones, triquinane III and pentaquinane IV were synthesized.

L11 ANSWER 2 OF 5 CAPLUS COPYRIGHT 2004 ACS on STN  
 AN 1989:23388 CAPLUS  
 DN 110:23388  
 TI An asymmetric intramolecular alkylation to form a **bicyclo** [3.1.0]hexanone derivative  
 AU Hamon, David P. G.; Shirley, Neil J.  
 CS Dep. Org. Chem., Univ. Adelaide, Adelaide, 5001, Australia  
 SO Journal of the Chemical Society, Chemical Communications (1988), (6), 425-6  
 CODEN: JCCCAT; ISSN: 0022-4936

DT Journal  
 LA English  
 OS CASREACT 110:23388  
 GI



AB (-)-(Hydroxymethyl)oxaspiro[2.5]octanone I, prepared in ≥90% enantiomeric excess by asym. epoxidn. of the allylic alc. precursor, undergoes intramol. cyclopropanation upon treatment with base to give (dihydromethylethyl)bicyclohexanone II with high diastereoselectivity.

L11 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2004 ACS on STN  
 AN 1971:42507 CAPLUS  
 DN 74:42507  
 TI Cyclopropanol derivatives as intermediates for organochemical synthesis  
 AU Wenkert, Ernest; Mueller, Richard August; Reardon, Edward J., Jr.; Sathe, S. S.; Scharf, D. J.; Tosi, Giorgio  
 CS Dep. Chem., Indiana Univ., Bloomington, IN, USA  
 SO Journal of the American Chemical Society (1970), 92(25), 7428-36  
 CODEN: JACSAT; ISSN: 0002-7863  
 DT Journal  
 LA English  
 OS CASREACT 74:42507  
 AB A terpene synthesis via the acid-induced transformations of cyclopropyl ethers and β-methoxycyclopropylcarbinols into quaternary α-methyl and α-vinyl carbonyl compds., resp., and similar reactions with gem-dimethoxycyclopropanes are described. A cyclopropylamine is inert. β-Methoxycyclo-propanecarboxylic esters are converted into γ-oxo carboxylic acid derivs. A similar ring unravelling of a β-acetoxyxyclopropyl ketone is used for the synthesis of dihydrojasmine. An α-methoxycyclopropylcarbinol is transformed into a cyclobutanone on acid treatment and a mechanistically related cyclobutanone interconversion process is used for the preparation of a bicyclic intermediate of the bourbonene sesquiterpenes.

L11 ANSWER 4 OF 5 CAPLUS COPYRIGHT 2004 ACS on STN  
 AN 1963:52824 CAPLUS  
 DN 58:52824  
 OREF 58:8922g-h,8923a-b  
 TI Synthesis and transformations of acetylenic α-glycols with a free acetylenic hydrogen. VI. Preparation of 3-(1-hydroxycyclohexyl)-1-butyn-3-ol and its conversions under influence of sulfuric acid  
 AU Favorskaya, T. A.; Samusik, B. N.  
 CS State Univ., Leningrad  
 SO Zhurnal Obshchey Khimii (1962), 32, 2128-34

CODEN: ZOKHA4; ISSN: 0044-460X

DT Journal

LA Unavailable

OS CASREACT 58:52824

GI For diagram(s), see printed CA Issue.

AB cf. CA 54, 24620f; 55, 23325h. Cyclohexanol and C<sub>2</sub>H<sub>2</sub> in presence of KOH gave 1-ethynylcyclohexanol, m. 21°, b<sub>14</sub> 89-1°, which added at 30-40° to HgO in 25% H<sub>2</sub>SO<sub>4</sub> and stirred 4-5 hrs. gave 80% 1-acetylhexanol, b<sub>7</sub> 74-5°, n<sub>20D</sub> 1.4711, and 5% I, b<sub>7</sub> 135-7°, m. 108-9°. To Na, dissolved in liquid NH<sub>3</sub> in the presence of a catalytic amount of Fe(NO<sub>3</sub>)<sub>3</sub> in the presence of air, was added C<sub>2</sub>H<sub>2</sub> over 2 hrs., followed by 1-acetylhexanol in Et<sub>2</sub>O; after 12 hrs. the mixture was treated with aqueous NH<sub>4</sub>Cl, and gave 65%

3-(1-hydroxycyclohexyl)-

1-butyn-3-ol (II), m. 64-5°, b<sub>15</sub> 127-8°. II suspended in CCl<sub>4</sub> was added over 1 hr. to concentrated H<sub>2</sub>SO<sub>4</sub>, at -14° and stirred 1 hr.; after treatment with ice, it gave some 2-methyl-2-ethynylsuberone (II), b<sub>10</sub> 73-7° (2,4-dinitrophenylhydrazone m. 198-9°), and a fraction, b<sub>18</sub> 119-22°, which was purified by treatment with KMnO<sub>4</sub> and gave 15% 3-methyl-2,2-pentamethylene-4-oxotetrahydrofuran (IV), b<sub>21</sub> 126-8°, n<sub>20D</sub> 1.4730, d<sub>20</sub> 1.0272 (2,4-dinitrophenylhydrazone m. 164.5-5°). II and KMnO<sub>4</sub> gave 90% 2-methylsuberone, b<sub>22</sub> 80-1°, n<sub>20D</sub> 80-1°, n<sub>20D</sub> 1.4581, and AcOH, along with Ac(CH<sub>2</sub>)<sub>3</sub>CO<sub>2</sub>H and adipic acid. IV and 30% KOH gave a distillate containing 2-methylsuberone and AcOH. III hydrogenated over Pd-CaCO<sub>3</sub> to 2-methyl-2-ethylsuberone, b<sub>4</sub> 67-8°, n<sub>20D</sub> 1.4612, d<sub>20</sub> 0.9280; 2,4-dinitrophenylhydrazone m. 81-2°.

L11 ANSWER 5 OF 5 CAPLUS COPYRIGHT 2004 ACS on STN

AN 1951:8765 CAPLUS

DN 45:8765

OREF 45:1589f-i,1590a-i,1591a-i,1592a

TI Piperidine and azabicyclo compounds. I. Via Michael condensations

AU Albertson, Noel F.

CS Sterling-Winthrop Research Inst., Rensselaer, NY

SO Journal of the American Chemical Society (1950), 72, 2594-9

CODEN: JACSAT; ISSN: 0002-7863

DT Journal

LA Unavailable

OS CASREACT 45:8765

GI For diagram(s), see printed CA Issue.

AB Since so many piperidine compds. show marked physiol. activity, their synthesis, by catalytic reduction to piperidines and **bicyclo N** compds. of  $\delta$ -keto nitriles prepared by Michael condensations between vinyl ketones and cyanoacetic esters or between CH<sub>2</sub>:CHCN (I) and  $\beta$ -ketones, was reinvestigated. Adding 600 ml. AcCH<sub>2</sub>CO<sub>2</sub>Et (II) to 3 g. Na in 400 ml. EtOH, followed by 246 ml. I at such a rate that the temperature

did not exceed 45°, distilling off the EtOH, washing the residue with H<sub>2</sub>O containing 10 ml. AcOH, and distilling gave 63% AcCH(CO<sub>2</sub>Et)(CH<sub>2</sub>)<sub>2</sub>CN (III).

b2

121°, n<sub>25D</sub> 1.4446, and a residue of AcC(CO<sub>2</sub>Et) (CH<sub>2</sub>CH<sub>2</sub>CN)<sub>2</sub> (C.A. 23,834). Adding 200 g. III to 200 g. Na<sub>2</sub>CO<sub>3</sub> in 1800 ml. H<sub>2</sub>O, refluxing 4 hrs., salting out with K<sub>2</sub>CO<sub>3</sub>, and extracting with Et<sub>2</sub>O gave 71% Ac(CH<sub>2</sub>)<sub>3</sub>CN (IV), b<sub>5.2</sub> 86.5°, n<sub>25D</sub> 1.4790 (2,4-dinitrophenylhydrazone, m. 154-5°). IV may also be prepared from I and Me<sub>2</sub>CO, but the yield is very low (8.6%) because of polycyanoethylation.  $\beta$ -Keto esters give

much higher yields of  $(CH_2)_2CN$  derivs. than do ketones. Reduction of IV with Raney Ni gave 85%  $MeC(CH_2)_4.NH$ . Addition of 168 g.  $AcCH(CH_2Ph)CO_2Et$  (V) to 0.5 g. Na in 200 ml. 95% EtOH, followed by 53 ml. I at such a rate that the temperature remained at 25-35°, acidification with alc. HCl 0.5 hr. after the addition of I, and distillation gave 141 g. (85%)  $AcC(CH_2Ph)(CO_2Et)(CH_2)_2CN$ , b1.5 172°, n25D 1.5068, and 35 g. V. Use of com. absolute EtOH gave  $PhCH_2CH(CO_2Et)(CH_2)_2CN$ , b2.0 152°, n25D 1.5002, as major or sole product by loss of an Ac group. Addition of 512 g.  $CH_2.CH_2.CHAc.CO.O$  to 2 g. Na in 300 ml. EtOH, followed by 290 ml. I, acidification of the mixture after 1 hr., and allowing to stand 1-2 days gave 86-92%  $CH_2.CH_2.CAc(CH_2CH_2CN).CO.O$  (VI), m. 44-6° (from MeOH), b1.5 162°, n25D 1.4790, which on refluxing 6 hrs. with 10% aqueous  $Na_2CO_3$ , salting out with  $K_2CO_3$ , extracting with iso-PrOH, and distilling gave a poor yield of yellow oil, b3.5 115-46° [2,4-dinitrophenylhydrazone, m. 159° (from  $AcOEt$ )]. VI (40 g.) hydrolyzed by 80 g. KOH in aqueous MeOH, acidified, extracted with  $AcOEt$ , and concentrated gave 22 g.  $\alpha$ -(2-hydroxyethyl)glutaric acid lactone, b1.0 163-6°.

$BzCH(CO_2Et)(CH_2)_2CN$  (VII) (100 g.), refluxed 10 hrs. with 100 g.  $Na_2CO_3$  and 900 ml.  $H_2O$ , extracted with  $Et_2O$ , dried, and distilled gave 37.0 g. (52%)  $Bz(CH_2)_3CN$ , b0.1 125°, n25D 1.5326, and 4 g.  $Bz(CH_2)_3CONH_2$  (VIII), m. 140-1° (from  $H_2O$ ). VIII was also prepared by condensing I with  $AcCHBzCO_2Et$  and hydrolyzing the condensation product with  $Na_2CO_3$  solution. Addition of 122 g. III and 50 ml.  $MeI$  to 15.3 g. Na in 300 ml. dry EtOH and working up the mixture in the usual manner after 2 days' standing gave, on distillation, 35.6 g.  $NC(CH_2)_2CHMeCO_2Et$ , b0.8 74-80°, n25D 1.4270, and 63.6 g.  $AcCMe(CO_2Et)(CH_2)_2CN$ , b0.8 109°, n25D 1.4461.  $AcC(CHMe_2)(CO_2Et)(CH_2)_2CN$ , b0.1 121° n25D 1.4542, was prepared in 37% yield by the method of Koelsch and Walker (C.A. 45, 1135f) and in poorer yield from III, iso-Pr<sub>2</sub>O, and  $BF_3$  by the method used by Hauser and Breslow (C.A. 34, 7875.6) to alkylate II. Other keto nitriles,  $AccRR'CH_2CH_2CN$ , prepared in a manner analogous to III: (R, R', yield (%), b.p. °C. (mm.), n25D resp., given):  $CH_2CH_2CO_2Me$ ,  $CO_2Et$ , 100, 166° (1.7), 1.4510;  $CH_2CH_2CO_2Et$ ,  $CO_2Et$ , 82, 168° (0.8), 1.4578;  $CH_2Ph$ ,  $CO_2Me$ , 56, 163° (0.2), 1.5158;  $C_6H_{13}$ ,  $CO_2Et$ , 73, 157° (2.9), 1.4511;  $C_7H_{15}$ ,  $CO_2Et$ , 81, 145° (0.9), 1.4505; iso-Bu,  $CO_2Et$ , 60, 125° (0.1), 1.4528. Also prepared were  $CO.CH_2.CH_2.CH_2.C(CO_2Et)(CH_2)_2CN$ , 82, 145° (1.5), 1.4663;  $AcC(CH_2CH_2CN).CH_2.C(CH_2Cl)_2.O.CO$ , 61, 199° (1.6), 1.4982; and  $BzCH(CO_2Et)(CH_2)_2CN$ , 86, 176° (0.7), 1.5131.  $AcC(CH_2OH)(CO_2Et)(CH_2)_2CN$ , n25D 1.4585, was obtained in 94% yield from IV and formalin. Reduction of 93 g.  $AcC(CO_2Et)(CH_2CH_2CO_2Me)(CH_2)_2CN$  in 400 ml. EtOH by Raney Ni and H at 100° and 50 lb. pressure for 6 hrs., removal of the EtOH in vacuo, and filtration from dilute  $Et_2O$  gave 36% 5-carbethoxy-9-methyl-2-oxo-1-azabicyclo[3.3.1]nonane, m. 170.4-1.3° (corrected, from EtOH). The  $Et_2O$  solution gave 37.9 g. (43%) Et 3-(2-carbomethoxyethyl)-2-methylnipecotate, b1.4 139°, n25D 1.4740.

A solution of 115 g. Et 2-(2-cyanoethyl)cyclopentan-1-one-2-carboxylate in 400 ml. EtOH reduced by Raney Ni and H at 120° and 400 lb. pressure for 7 hrs. gave, on distillation, 79 g. (73%) 4a-carbethoxyoctahydro-1-pyrindine (IX), b0.6 87°, n25D 1.4799 (cf. Henecka, Fr. 881, 360), and 14.7 g. of a yellow oil, b0.4 153-209°, n25D 1.4852-8, m. 52.9-4.8° (corrected, from  $Et_2O$ ), which may be the alc. obtained by reduction of the C:O bond. Reduction of 1 mole VI in 400 ml. MeOH by Raney Ni and H at 90° and 500 lb. pressure for 6 hrs. and treatment of the product with alc. HCl gave 62 g. 1-methyl-2-aza-8-oxaspiro[5.4]decan-7-one-HCl (X), m. 265-6.4° (corrected, from EtOH). Hydrogenation of 116.2 g. Et 2-methylnipecotate in 400 ml. EtOH and 68 ml. 37% formalin at 25°

and 400 lb. pressure with a buffered Pd-C catalyst required less than 45 min., giving on distillation 122.2 g. (98%) Et 1,2-dimethylnipecotate (XI), b0.2

73°, n<sub>25D</sub> 1.4557 [methiodide, m. 185.0-6.4° (corrected)]. The following piperidines (Xa) were prepared in a similar fashion (R1, R2, R3, R4, % yield, b.p. °C. (mm.), n<sub>25D</sub>, resp.): H, Me, H, H, 85, 117° (760), 1.444; H, Me, H, CO<sub>2</sub>Et, 86, 59° (0.5), 1.4557 [1-PhNHCO derivative, m. 134.6-6.0° (corrected)]; Me, Me, H, CO<sub>2</sub>H, -, - (-), - [HCl salt, m. 185.8-8° (corrected)]; H, Me, Me, CO<sub>2</sub>Et, 89, 63° (0.1), 1.4581 [HCl salt, m. 164.4-5.0° (corrected)]; Me, Me, Me, CO<sub>2</sub>Et, 58, 67° (0.9), 1.4592; H, Me, iso-Pr, CO<sub>2</sub>Et, 84, 91° (0.3), 1.4666; Me, Me, iso-Pr, CO<sub>2</sub>Et, 82, 92° (0.6), 1.4642; H, Me, iso-Bu, CO<sub>2</sub>Et, 91, 98° (0.3), 1.4658; Me, Me, iso-Bu, CO<sub>2</sub>Et, 84, 95° (0.9), 1.4612; H, Me, C<sub>6</sub>H<sub>13</sub>, CO<sub>2</sub>Et, 85, 106° (0.2), 1.4627; Me, Me, C<sub>6</sub>H<sub>13</sub>, CO<sub>2</sub>Et, 80, 130° (1.9), 1.4609; H, Me, C<sub>7</sub>H<sub>15</sub>, CO<sub>2</sub>Et, 63, 120° (0.7), 1.4665; Me, Me, C<sub>7</sub>H<sub>15</sub>, CO<sub>2</sub>Et, 33, 136° (1.5), 1.4638; Me, Me, PhCH<sub>2</sub>, CO<sub>2</sub>Et, 81, 134° (0.2), 1.5110; H, Me, PhCH<sub>2</sub>, CO<sub>2</sub>Me, 78, 137° (0.6), 1.5335; Me, Me, PhCH<sub>2</sub>, CO<sub>2</sub>Me, 75, 132° (0.8), 1.5223; H, Me, Ph, CO<sub>2</sub>Et, 57, 131° (0.3), 1.5323; H, Me, -(CH<sub>2</sub>)<sub>2</sub>OCO-, 30, - (-), - (HCl salt, m. 265-6°); Me, Me, -(CH<sub>2</sub>)<sub>2</sub>OCO-, 70, - (-), - (HCl salt, m. 72-5°); Me, -(CH<sub>2</sub>)<sub>3</sub>-, CO<sub>2</sub>Et, 85, 83° (1.0), 1.4755; H, Me, (CH<sub>2</sub>)<sub>2</sub>CO<sub>2</sub>Et, CO<sub>2</sub>Et, 65, 133° (0.9), 1.4740; Me, Me, (CH<sub>2</sub>)<sub>2</sub>CO<sub>2</sub>Et, CO<sub>2</sub>Et, 86, 128° (1.0), 1.4726; H, Me, (CH<sub>2</sub>)<sub>3</sub>NH<sub>2</sub>, Me, 77, 80° (1.2), 1.5031 (b760 250-5°; di-HCl salt, m. 243-6°; monopicrate, m. 194-5°); H, Ph, H, H, 80, 80° (0.2), 1.5232 (readily hydrated on shaking with H<sub>2</sub>O); Me, Ph, H, CO<sub>2</sub>Et, 94, 116° (0.1), 1.5178. Reduction of 90 g. III in 400 ml. EtOH by Raney Ni and H at 60° and 600 lb. pressure for 1-3 hrs./mole H gave 89-93% 5-carbethoxy-6-methyltetrahydro-2-pyronimine, b0.9 103-6°, n<sub>25D</sub> 1.5350 (supercooled, solid at room temperature), which loses NH<sub>3</sub> on refluxing with HCl and is undoubtedly identical with Henecka's 1-cyanopentan-4-ol-3-carboxylic ester (C.A. 44, 2520c). Reduction of γ-cyano esters with Raney Ni gave only piperidines, usually in high yield, while reduction of III gave 86% XI. These results are in marked contrast to those of Henecka (see above), who stated that III does not give a piperidine on reduction unless first converted to the corresponding β-aminocrotonic ester with NH<sub>3</sub>. Reduction of 165 g. VII in 335 ml. EtOH with Raney Ni and H at 115° and 700 lb. pressure for 1 hr. and distillation gave 113.1 g. (73%) Et 2-phenylnipecotate, b0.08 113°, n<sub>25D</sub> 1.5227 [HCl salt, m. 202.2-3.4° (corrected); phosphate, m. 183.3-4.9° (corrected)], some BzH, and 19.3 g. of an oil depositing crystals of 5-carbethoxy-6-phenyltetrahydro-2-pyronimine, m. 106.2-8.4° (corrected) (from petr. ether, AcOEt, and iso-PrOH successively). 4-(2,3-Dimethoxyphenyl)-3-buten-2-one (XII), b1.1 135-9°, n<sub>25D</sub> 1.5810 (70% yield), and AcCH<sub>2</sub>CHPhCH(CN)CO<sub>2</sub>Et, b0.8 160-5°, n<sub>25D</sub> 1.5102, were prepared in the usual manner. Addition of CH(CN)EtCO<sub>2</sub>Et (XIII) to PhCH:CHAc gave 23% AcCH<sub>2</sub>CHPhCET(CN)CO<sub>2</sub>Et, b1.4 153-61° (decomposition), n<sub>25D</sub> 1.5050. A solution of 103 g. XII and 71 g. XIII in 100 ml. EtOH, just basic to EtONa, warmed 2.5 hrs. on a steam bath, acidified with alc. HCl, concentrated, and distilled gave 129 g. of an oil, b1.5 55-151°, which on treatment with EtONa and 3 days' standing gave 96.5 g. Et 2-cyano-2-ethyl-3-(2,3-dimethoxyphenyl)-5-oxohexanoate, b1.5-2.4 160-97°, n<sub>25D</sub> 1.5168 (supercooled), m. 91-4° (from EtOH). Octahydro-4-methyl-1H-quinolizine(?) (HCl salt, m. above 360°; cf. Lukes and Sorm, C.A. 42, 7780d) and 1-(2-piperidyl)-4-pentanol were prepared by reduction of 1-(2-pyridyl)-4-pentanone by Raney Ni and H at 150° and 250 lb.

pressure (Boekelheide and Rothchild, C.A. 43, 4267e). AcCH<sub>2</sub>Ac (50 g.), 1.5 g. Na, and 108 g. 2-vinylpyridine refluxed 7 hrs. and distilled gave 14.1 g. 1-(2-pyridyl)-4-pentanone (XIV), b<sub>1</sub> 84-118°, and 37.4 g. of the 3-Ac derivative of XIV, b<sub>1</sub> 118-19°. The following piperidines (XV) were prepared by the Raney Ni reduction of the keto nitriles in EtOH or by reductive methylation of the piperidines with formalin and a Pd-C catalyst as previously described (R1, R2, R3, b.p. (mm.), n<sub>25D</sub>, resp.): H, H, Ph, 130° (1.0), 1.5172; Me, H, Ph, 127° (1.5), 1.5104; H, Et, Ph, 131° (1.6), 1.5148; Me, Et, Ph, 118° (0.6), 1.5105; H, Et, 2,3-(MeO)2C<sub>6</sub>H<sub>3</sub>, 158° (0.8), 1.5194; Me, Et, 2,3-(MeO)2C<sub>6</sub>H<sub>3</sub>, 153° (0.9), 1.5152. Whereas reduction of α-(2-cyanoethyl)acetoacetic esters gave principally piperidines, reduction of Et α-[2-(2-pyridyl)ethyl]acetoacetate in EtOH with Raney Ni at 150° gave 40% Et octahydro-4-methyl-1H-quinolizine-3-carboxylate and 45% octahydro-3-(1-hydroxyethyl)-4-oxo-4H-quinolizine, the piperidone type of ring closure predominating. Of the mols. having more than 1 asym. C atom, only a single dl-modification is obtained on reduction. Nearly all these piperidines and **bicyclo** compds. have been prepared in only 3 steps from readily available and cheap materials. Some of these compds. show mild analgesic activity.

=> d his

(FILE 'HOME' ENTERED AT 09:11:49 ON 13 MAR 2004)

FILE 'REGISTRY' ENTERED AT 09:11:59 ON 13 MAR 2004

L1                   STRUCTURE UPLOADED  
 L2                   2 S L1 SSS FULL  
 L3                   2 S L2 SSS FULL

FILE 'CAOLD' ENTERED AT 09:12:58 ON 13 MAR 2004

FILE 'CAOLD' ENTERED AT 09:13:07 ON 13 MAR 2004  
 S L1

FILE 'REGISTRY' ENTERED AT 09:13:15 ON 13 MAR 2004  
 L4                   2 S L1 SSS FULL

FILE 'CAOLD' ENTERED AT 09:13:16 ON 13 MAR 2004  
 L5                   0 S L4 SSS FULL

FILE 'CAPLUS' ENTERED AT 09:14:06 ON 13 MAR 2004

L6                   1 S L2  
 L7                   1 S L3  
 L8                   50 S OXASPIRO AND BICYCLO  
 L9                   3 S L8 AND NONAN AND 2-ONE  
 L10                  5 S L8 AND DECAN  
 L11                  5 S L10 AND ONE

=> s oxaspiro and tricyclo  
 L12                  12 OXASPIRO AND TRICYCLO

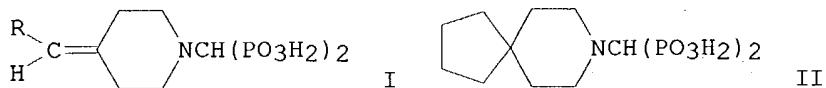
=> d 112 fbib hitstr abs total

L12 ANSWER 1 OF 12 CAPLUS COPYRIGHT 2004 ACS on STN  
 AN 2002:863865 CAPLUS

DN 139:69303  
 TI Product subclass 42:  $\gamma$ -silyl alkyl halides, alcohols, and esters thereof  
 AU Michael, J. P.; de Koning, C. B.  
 CS Molecular Science Institute, School of Chemistry, University of Witwatersrand, Johannesburg, 2050, S. Afr.  
 SO Science of Synthesis (2002), 4, 947-971  
 CODEN: SSCYJ9  
 PB Georg Thieme Verlag  
 DT Journal; General Review  
 LA English  
 AB A review describes various methods for the synthesis of  $\gamma$ -silyl alkyl halides, alcs., and esters, and their applications. The methods described include the synthesis from silyl anions and functionalized three-carbon electrophiles; from silicon electrophiles and functionalized three-carbon nucleophiles; from  $\alpha$ -silylated carbanions and epoxides; hydrosilylation of allylic compds.; coupling between vinylsilanes and aldehydes or ketones; addns. of allylsilanes; addition of  $\beta$ -silylated carbanions to aldehydes and ketones; and other miscellaneous methods.  
 RE.CNT 118 THERE ARE 118 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 2 OF 12 CAPLUS COPYRIGHT 2004 ACS on STN  
 AN 1995:419363 CAPLUS  
 DN 123:33413  
 TI Functionalized bicyclo[2.2.2]octenones: synthesis and crystal structure of endo-4,5-dihydrospiro[furan-2(3H),8'-tricyclo[5.2.2.0<sup>2,6</sup>]undeca-3',10'-dien]-9'-one  
 AU Singh, Vishwakarma; Bedekar, Ashutosh V.; Caira, Mino R.  
 CS Dep. Chem., Fac. Sci., Univ. Baroda, Baroda, 390 002, India  
 SO Journal of Chemical Research, Synopses (1995), (2), 45  
 CODEN: JRPSDC; ISSN: 0308-2342  
 PB Royal Society of Chemistry  
 DT Journal  
 LA English  
 AB A facile synthesis of the title compound, a potential intermediate for triquinanes, by  $\pi$ 4s +  $\pi$ 2s cycloaddn. of in situ-generated 1-oxaspiro[4,5]deca-7,9-dien-6-one and cyclopentadiene is reported. The structure and stereochem. of the adduct has been determined by single-crystal x-ray anal.

L12 ANSWER 3 OF 12 CAPLUS COPYRIGHT 2004 ACS on STN  
 AN 1994:409498 CAPLUS  
 DN 121:9498  
 TI Synthesis and evaluation of (piperidinomethylene)bis(phosphonic acid) derivatives as anti-osteoporosis agents  
 AU Mimura, Mitsuo; Hayashida, Mitsuo; Nomiyama, Kiyoshi; Ikegami, Satoru; Iida, Yasuhito; Tamura, Makoto; Hiyama, Yoshiyuki; Ohishi, Yoshitaka  
 CS Cent. Res. Inst., Kaken Pharm. Co., Ltd., Kyoto, 607, Japan  
 SO Chemical & Pharmaceutical Bulletin (1993), 41(11), 1971-86  
 CODEN: CPBTAL; ISSN: 0009-2363  
 DT Journal  
 LA English  
 GI



AB Some (piperidinomethylene)bis(phosphonic acid) derivs. were prepared and their activity to inhibit a rise in serum calcium induced by parathyroid hormone in thyroparathyroidectomized rats was evaluated. Several (4-alkylidene-, 4,4-dialkyl-, or 4-alkyl-4-halopiperidinomethylene)bis(phosphonic acid) derivs. showed considerable inhibitory activity. Compds. having aromatic and polar substituents such as azido, hydroxy, amino and amido on the piperidine ring were generally inactive. In this study, two 4-alkylidene compds. I (R = H, Me) (8a, b) and a 4,4-cyclic dialkyl compound II (61) showed potent activity when administered either i.v. or perorally.

L12 ANSWER 4 OF 12 CAPLUS COPYRIGHT 2004 ACS on STN

AN 1994:271187 CAPLUS

DN 120:271187

TI Preparation of antiherpes peptide derivatives having a ureido N-terminus

IN Deziel, Robert; Moss, Neil; Plante, Raymond

PA Bio-Mega/Boehringer Ingelheim Research Inc., Can.

SO Eur. Pat. Appl., 27 pp.

CODEN: EPXXDW

DT Patent

LA English

FAN.CNT 1

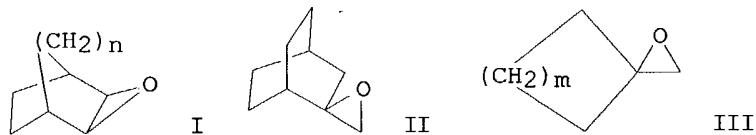
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 560274	A1	19930915	EP 1993-103734	19930309
	EP 560274	B1	19980624	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE US 1992-849922 A 19920312	
	AT 167682	E	19980715	AT 1993-103734	19930309
				US 1992-849922 A 19920312	
	ZA 9301746	A	19931006	ZA 1993-1746	19930311
				US 1992-849922 A 19920312	
	HU 63853	A2	19931028	HU 1993-697	19930311
				US 1992-849922 A 19920312	
	JP 06041189	A2	19940215	JP 1993-49767	19930311
				US 1992-849922 A 19920312	
	CA 2092652	AA	19930913	CA 1993-2092652	19930312
	CA 2092652	C	20010724		
				US 1992-849922 A 19920312	
	AU 9335162	A1	19930916	AU 1993-35162	19930312
	AU 665059	B2	19951214		
				US 1992-849922 A 19920312	
	CN 1096299	A	19941214	CN 1993-106796	19930608
				US 1992-849922	19920312
	US 5830864	A	19981103	US 1995-502981	19950717
				US 1992-849922 B219920312	
				US 1993-25682	B119930303

OS MARPAT 120:271187

AB ABNHCH(CH<sub>2</sub>COR<sub>1</sub>)CONHCH(CR<sub>2</sub>R<sub>3</sub>CO<sub>2</sub>H)COD [A = R<sub>4</sub>NHCO; R<sub>4</sub> = (unsatd.) alkyl, (substituted) phenylalkyl, alkylcycloalkyl; B = NHCHR<sub>5</sub>CO; R<sub>5</sub> = 1-tricyclo[3.3.1.13,7]decyl, (substituted) alkyl; R<sub>1</sub> = alkyl, cycloalkyl, amino; R<sub>2</sub> = H, alkyl, R<sub>3</sub> = alkyl; or R<sub>2</sub> = H, R<sub>3</sub> = phenylalkyl;

or R2R3C = cycloalkyl; D = NHR8; R8 = alkyl], were prepared. Thus, Pr2CHNHCO-Tbg-Asp(pyrrolidino)-Asp(cyPn)- $\gamma$ MeLeucinal [Tbg = (S)-2-amino-3,3-dimethylbutanoate residue,  $\gamma$ MeLeu = (S)-2-amino-4,4-dimethylpentanoate residue, Asp(cyPr) = (S)- $\gamma$ -amino-1-carboxycyclopentaneacetate residue], prepared by solution phase reactions, inhibited Herpes simplex virus (HSV) ribonucleotide reductase with IC50 = 0.08  $\mu$ M, and inhibited HSV replication in cell culture with EC50 = 75  $\mu$ M. Title compds. act synergistically with antiviral nucleoside analogs.

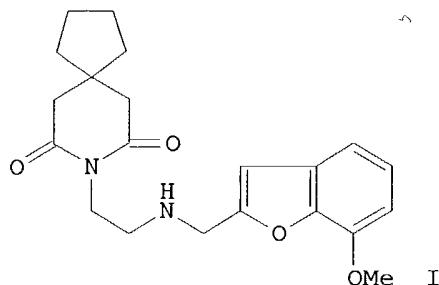
L12 ANSWER 5 OF 12 CAPLUS COPYRIGHT 2004 ACS on STN  
 AN 1993:408173 CAPLUS  
 DN 119:8173  
 TI Molecular mechanical study of structure, strain, and conformation of alicyclic epoxides  
 AU Kas'yan, L. I.; Seferova, M. F.; Porubleva, L. V.  
 CS Dnepropetr. Gos. Univ., Dnepropetrovsk, Ukraine  
 SO Zhurnal Organicheskoi Khimii (1992), 28(3), 449-60  
 CODEN: ZORKAE; ISSN: 0514-7492  
 DT Journal  
 LA Russian  
 GI



AB The MM2 method was used to study epoxides of cyclic and bicyclic compds., e.g., I ( $n = 1, 2$ ), II, and III ( $m = 1, 2, 3$ ). Relations between strain energy and some geometric and physicochem. parameters were discussed.

L12 ANSWER 6 OF 12 CAPLUS COPYRIGHT 2004 ACS on STN  
 AN 1993:59575 CAPLUS  
 DN 118:59575  
 TI N-[[[(2-benzofuranyl)methyl]amino]alkyl]carboxamides, a method for their preparation and their use as antidepressants, antipsychotics and anxiolytics  
 IN Stack, Gary P.  
 PA American Home Products Corp., USA  
 SO U.S., 10 pp.  
 CODEN: USXXAM  
 DT Patent  
 LA English  
 FAN.CNT 1

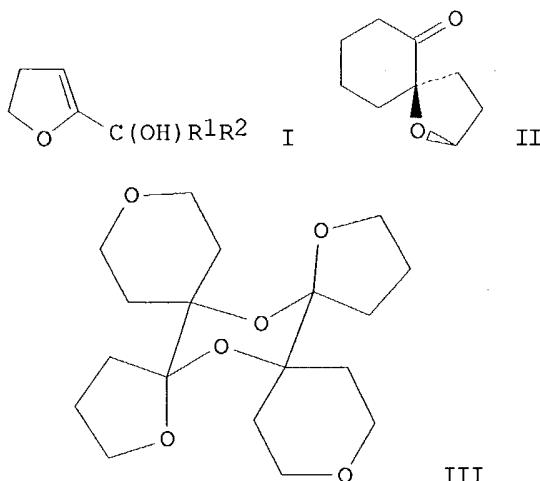
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 5134140	A	19920728	US 1991-719853	19910621
				US 1991-719853	19910621
OS	CASREACT 118:59575; MARPAT 118:59575				
GI					



AB Certain N-[[[(2-benzofuranyl)methyl]amino]alkyl]carboxamides, such as derivs. of **tricyclo[3.3.1.13,7]decane-1-carboxamide** or 4-fluorobenzamide, are claimed; also claimed is 8-[2-[[7-methoxy-2-benzofuranyl)methyl]amino]ethyl]-8-azaspiro[4.5]decane-7,9-dione (I). Methods for the treatment of psychoses, depression or anxiety are claimed which comprise the administration of said compds. I.HCl was prepared from 3,3-tetramethyleneglutaric anhydride and 2-[[7-methoxy-2-benzofuranyl)methyl]amino]ethylamine. I had activity as a 5-HT<sub>1a</sub>-agonist.

L12 ANSWER 7 OF 12 CAPLUS COPYRIGHT 2004 ACS on STN  
 AN 1991:632012 CAPLUS  
 DN 115:232012  
 TI Samarium diiodide promoted spirolactonization of cycloalkanones  
 AU Csuk, Rene; Hu, Zhong; Abdou, Mohamed; Kratky, Christoph  
 CS Pharm. Chem. Inst., Univ. Heidelberg, Heidelberg, D-W6900, Germany  
 SO Tetrahedron (1991), 47(34), 7037-44  
 CODEN: TETRAB; ISSN: 0040-4020  
 DT Journal  
 LA English  
 OS CASREACT 115:232012  
 GI For diagram(s), see printed CA Issue.  
 AB The reaction of cycloalkanones with Me 3-bromopropionate and SmI<sub>2</sub> afforded spiroannellated  $\gamma$ -lactones, e.g., I (n = 4-7), pinacols, and unprecedented hydroxycycloalkyloxaspiroalkanones II.

L12 ANSWER 8 OF 12 CAPLUS COPYRIGHT 2004 ACS on STN  
 AN 1990:552342 CAPLUS  
 DN 113:152342  
 TI Response of 2-lithio-4,5-dihydrofuran - ketone adducts to acid catalysis  
 AU Paquette, Leo A.; Lawhorn, David E.; Teleha, Christopher A.  
 CS Evans Chem. Lab., Ohio State Univ., Columbus, OH, 43210, USA  
 SO Heterocycles (1990), 30(2, Spec. Issue), 765-9  
 CODEN: HTCYAM; ISSN: 0385-5414  
 DT Journal  
 LA English  
 OS CASREACT 113:152342  
 GI



AB Tert. allylic alcs. I [ $R_1 = R_2 = Me$ ;  $R_1R_2 = (CH_2)_4$ ,  $CH_2CH_2OCH_2CH_2$ , adamantlyl, etc.] cyclodimerized to spirodioxanes or rearranged to ring-expanded spirocyclic ketones. E.g., the treatment of I [ $R_1R_2 = (CH_2)_4$ ] with Dowex-50X gave 71% spirocyclic ketone II, while treatment of I ( $R_1R_2 = CH_2CH_2OCH_2CH_2$ ) with 4-MeC<sub>6</sub>H<sub>4</sub>SO<sub>3</sub>H gave spirodioxane III.

L12 ANSWER 9 OF 12 CAPLUS COPYRIGHT 2004 ACS on STN

AN 1989:594168 CAPLUS

DN 111:194168

TI A simple iterative approach to the synthesis of cis-cisoid-cis-tricyclo[6.3.0.02,6]undecane carbon skeleton

AU Vankar, Padma S.; Chandrasekaran, Srinivasan

CS Dep. Chem., Indian Inst. Technol., Kanpur, 208016, India

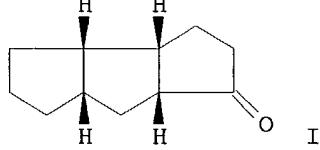
SO Bulletin of the Chemical Society of Japan (1989), 62(4), 1388-9  
CODEN: BCSJA8; ISSN: 0009-2673

## DT Journal

## LA English

OS CASREACT

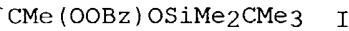
GI



AB In an iterative synthesis utilizing only four reagents, cyclopentanone has been converted into **cis-cisoid-cis-tricyclo[6.3.0.02,6]undecane I** in high yield. Thus, iterative treatment of cyclopentanone with  $\text{BrMgCH}_2\text{CH}_2\text{CH}:\text{CH}_2$ , hexadecyltrimethylammonium permanganate,  $\text{P}_2\text{O}_5/\text{MeSO}_3\text{H}$ , and catalytic hydrogenation gave I.

L12 ANSWER 10 OF 12 CAPLUS COPYRIGHT 2004 ACS on STN

AN 1989:7169 CAPLUS  
 DN 110:7169  
 TI Site-selective oxidation of saturated hydrocarbons by intramolecular reactions  
 AU Saito, Isao; Mano, Takashi; Nagata, Ryu; Uematsu, Nobuyuki; Matsuura, Teruo  
 CS Fac. Eng., Kyoto Univ., Kyoto, 606, Japan  
 SO Studies in Organic Chemistry (Amsterdam) (1988), 33(Role Oxygen Chem. Biochem.), 73-8  
 CODEN: SOCHDQ; ISSN: 0165-3253  
 DT Journal  
 LA English  
 GI



AB A novel oxidation method utilizing silyl-protected peroxy ester I and Fe(ClO<sub>4</sub>)<sub>3</sub> has been devised for the oxidation of saturated hydrocarbons. Regioselective oxidation of an alkyl chain and a steroidal skeleton is accomplished by the intramol. version of this method.

L12 ANSWER 11 OF 12 CAPLUS COPYRIGHT 2004 ACS on STN  
 AN 1965:462789 CAPLUS  
 DN 63:62789  
 OREF 63:11450f-h  
 TI Perhydroindan derivatives. V. The synthesis of some 3a-substituted derivatives  
 AU House, Herbert O.; Boots, Sharon G.; Jones, Vera K.  
 CS Massachusetts Inst. of Technol., Cambridge  
 SO Journal of Organic Chemistry (1965), 30(8), 2519-27  
 CODEN: JOCEAH; ISSN: 0022-3263  
 DT Journal  
 LA English  
 OS CASREACT 63:62789  
 GI For diagram(s), see printed CA Issue.  
 AB cf. CA 60, 6800c. Several model compounds for ring closure studies have been prepared including 3a-carbomethoxymethyl-5-oxo-cis-perhydroindan, 3a-acetyl-5-oxo-cis-perhydroindan, and the epoxide of methyl 3-methylenecyclohexylacetate. The diazo ketones I and II were converted to the corresponding cyclopropyl ketones III and IV and the reactions of these cyclopropyl ketones with hydrogen bromide and with lithium in ammonia were studied. Application of the Arndt-Eistert reaction to I yielded, in addition to the expected product V, the cyclopropyl ketone III and two cyclobutanone derivatives VI and VII.

L12 ANSWER 12 OF 12 CAPLUS COPYRIGHT 2004 ACS on STN  
 AN 1960:6778 CAPLUS  
 DN 54:6778  
 OREF 54:1364e-i  
 TI Substituted  $\gamma$ -butyrolactones  
 IN Sanne, Walter  
 PA Badische Anilin- & Soda-Fabrik Akt.-Ges.

DT Patent  
 LA Unavailable  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 1018856		19571107	DE	
GI	For diagram(s), see printed CA Issue.				
AB	Substituted succinic acid anhydrides were hydrogenated in the presence of organic solvents and of catalysts at elevated temps. to give the title compds., useful as intermediates in the manufacture of pesticides and pharmaceuticals. Thus, 200 g. maleic acid anhydride adduct of cyclooctatetraene (I), 300 g. dioxane, and 20 g. Raney Ni was hydrogenated 3 hrs. at 180°/150 atmospheric in a stirring autoclave, the catalyst separated, the solvent removed, and the residue distilled to give the lactone of 2-hydroxymethyl tricyclo[2.2.4.0 <sup>7,10</sup> ]decane-3-carboxylic acid of the formula II (X = CO, Y = CH <sub>2</sub> ), b15 195°, m. 113-14°. I in cyclohexane hydrogenated 3 hrs. at 260°/200 atmospheric in the presence of Raney Ni gave II, b0.2 120-5°, besides a tetrahydrofuran derivative of the formula II (X = Y = CH <sub>2</sub> ), b0.8 84-6°. I in dioxane hydrogenated 8 hrs. at 40°/200 atmospheric in the presence of Raney Ni gave II (X = CO, Y = CH <sub>2</sub> ) besides the hydrogenated starting compound of the formula II (X = Y = CO), m. 143-4°. <i>α,α</i> -Heptamethylenesuccinic acid anhydride in dioxane hydrogenated in the presence of Raney Ni 4 hrs. at 260°/150 atmospheric gave mixed <i>α,α</i> -heptamethylenebutyrolactone and <i>β,β</i> -heptamethylenebutyrolactone, b0.1 92-4°, besides <i>β,β</i> -heptamethylenetetrahydrofuran, b0.2 80-4°. <i>α</i> -Methyl- <i>α</i> -phenylsuccinic acid anhydride in dioxane hydrogenated in the presence of Raney Ni 3 hrs. at 180°/200 atmospheric gave mixed <i>α</i> -methyl- <i>α</i> -phenyl- and <i>β</i> -methyl- <i>β</i> -phenylbutyrolactones, b0.1 89-91°.				

=> s oxaspiro and decan  
 L13 139 OXASPIRO AND DECAN

=> s l13 and one  
 L14 127 L13 AND ONE

=> s oxaspiro and nonan  
 L15 85 OXASPIRO AND NONAN

=> s l15 and one  
 L16 82 L15 AND ONE

=> s l14 and l16  
 L17 34 L14 AND L16

=> s l17 and tricyclo  
 L18 1 L17 AND TRICYCLO

=> s l17 and bicyclo  
 L19 1 L17 AND BICYCLO

=> s l17 fbib hitstr abs total  
 MISSING OPERATOR L17 FBIB  
 The search profile that was entered contains terms or

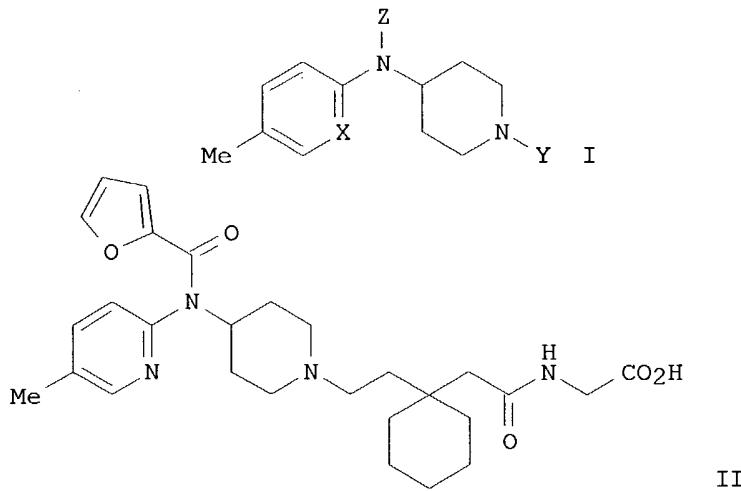
nested terms that are not separated by a logical operator.

=> d 117 fbib hitstr abs total

L17 ANSWER 1 OF 34 CAPLUS COPYRIGHT 2004 ACS on STN  
 AN 2003:335101 CAPLUS  
 DN 138:353836  
 TI Preparation of 4-[(2-furoyl)amino]piperidine derivatives and intermediates as inhibitors of side effects of opioid  $\mu$  receptor agonists  
 IN Fukutomi, Ryuuta; Inoue, Hitoshi; Kawamura, Koji; Kishimoto, Takuya; Suzuki, Masashi; Shibayama, Rie; Kojima, Kazuko; Hagiwara, Kouichirou  
 PA Kyorin Pharmaceutical Co., Ltd., Japan; Nisshin Pharma Inc.  
 SO PCT Int. Appl., 295 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA Japanese  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2003035645	A1	20030501	WO 2002-JP10449	20021008
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG	
					JP 2001-311828 A 20011009

OS MARPAT 138:353836  
 GI



AB The title compds. I [wherein X = CH or N; Y = H or (un)substituted alkyl;

$Z = H$  or furoyl] and pharmaceutically acceptable salts are prepared. For example, the compound II was prepared in a multi-step synthesis. I are useful in preventing or treating side effects of opioid  $\mu$  receptor agonists selected from among constipation, nausea, vomiting, itching, postoperative ileus, paralytic ileus, irritable bowel syndrome, or chronic itching (no data). I showed antagonist activity with pA<sub>2</sub> of 7.85 to 8.86 against opioid  $\mu$  receptor in guinea pig. Formulations containing I as an active ingredient were also described.

RE.CNT 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L17 ANSWER 2 OF 34 CAPLUS COPYRIGHT 2004 ACS on STN

AN 2002:539676 CAPLUS

DN 137:93693

TI Preparation of (quinolinylmethoxyphenylsulfonylmethyl)-substituted pyrrolidineacetamides and piperidineacetamides and related compounds as MMP, TNF, and/or aggrecanase inhibitors

IN Chen, Xiao-Tao; Xue, Chu-Biao

PA Bristol-Myers Squibb Company, USA

SO PCT Int. Appl., 151 pp.

CODEN: PIXXD2

DT Patent

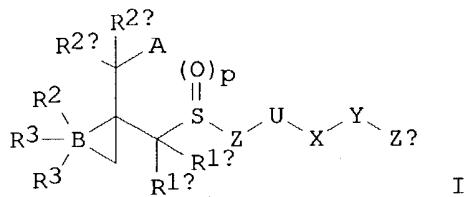
LA English

FAN.CNT 1

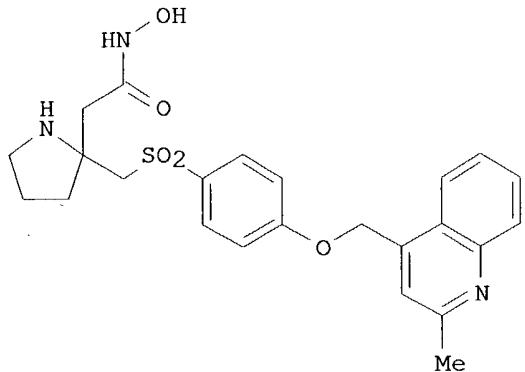
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002055516	A2	20020718	WO 2002-US761	20020109
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG	US 2001-260952PP 20010111
	US 2002137734	A1	20020926	US 2002-43627	20020109
				US 2001-260952PP	20010111
EP	1355901	A2	20031029	EP 2002-714734	20020109
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR			US 2001-260952PP	20010111
				WO 2002-US761	W 20020109

OS MARPAT 137:93693

GI



I



II

AB Title compds. I [wherein A = COR<sub>5</sub>, CO<sub>2</sub>H, CH<sub>2</sub>CO<sub>2</sub>H, CO<sub>2</sub>R<sub>6</sub>, CONHOH, CONHOR<sub>5</sub>, CONHOR<sub>6</sub>, N(OH)CHO, N(OH)COR<sub>5</sub>, SH, CH<sub>2</sub>SH, SONH<sub>a</sub>, SN<sub>2</sub>H<sub>2</sub>R<sub>a</sub>, PO<sub>3</sub>H<sub>2</sub>, or PO(OH)NR<sub>a</sub>; ring B = 3-10 membered (hetero)cycle; Z = absent or (un)substituted (hetero)cyclyl; U = absent or O, NH, N(alkyl), CO, CO<sub>2</sub>, OCO, CONH, NHCO, OCO<sub>2</sub>, etc. X = absent or alkylene, alkenylene, or alkynylene; Y = absent or O, NH, N(alkyl), SO<sub>2</sub>-2, or CO; Za = (un)substituted (hetero)cyclyl; R<sub>1a</sub> and R<sub>1b</sub> = independently H, alkyl, Ph, PhCH<sub>2</sub>, CH<sub>2</sub>OR<sub>3</sub>, or (un)substituted CH<sub>2</sub>NH<sub>2</sub>; or CR<sub>1a</sub>R<sub>1b</sub> = (hetero)cyclyl; R<sub>2</sub> = Q or (un)substituted alkylene-Q, alkenylene-Q, or alkynylene-Q, Q-substituted alkoxy(alkyl), carbamoyl(alkyl), sulfamoyl(alkyl), etc.; R<sub>2a</sub> and R<sub>2b</sub> = independently H, alkyl, Ph, PhCH<sub>2</sub>, CH<sub>2</sub>OR<sub>3</sub>, or (un)substituted CH<sub>2</sub>NH<sub>2</sub>; or CR<sub>2a</sub>R<sub>2b</sub> = heterocyclyl; R<sub>3</sub> = Q<sub>1</sub> or (un)substituted alkylene-Q<sub>1</sub>, alkenylene-Q<sub>1</sub>, Q<sub>1</sub>-substituted alkoxy(alkyl), carbamoyl(alkyl), sulfamoyl(alkyl), etc.; or C(R<sub>3</sub>)<sub>2</sub> = (un)substituted (hetero)cyclyl; Q<sub>1</sub> = H or (un)substituted Ph, naphthyl, or heteroaryl; R<sub>a</sub> = H, alkyl, Ph, or PhCH<sub>2</sub>; p = 0-2; R<sub>5</sub> = (un)substituted alkyl; R<sub>6</sub> = phenyl(alkyl), naphthyl, cycloalkyl, alkylcarbonyloxy, etc.; or pharmaceutically acceptable salt thereof] were prepared as matrix metalloprotease (MMP), tumor necrosis factor (TNF), and aggrecanase inhibitors. For example, the N-hydroxy-2-(quinolinylmethoxyphenylsulfonylmethyl)-2-pyrrolidineacetamide II•2CF<sub>3</sub>CO<sub>2</sub>H was prepared in twelve steps starting with the esterification of N-Boc-proline using MeI and K<sub>2</sub>CO<sub>3</sub> in acetone. Key steps include the addition of 4-mercaptophenol and 4-chloromethyl-2-methylquinoline•HCl. A number of invention compds. exhibited Ki values of ≤ 10 μM against MMP-1, 2, 3, 9, and 13. Thus, I are useful for the treatment of inflammatory disorders and thromboembolic disorder (no data).

L17 ANSWER 3 OF 34 CAPLUS COPYRIGHT 2004 ACS on STN  
 AN 2001:321295 CAPLUS  
 DN 135:92230

TI A detailed ab initio MO investigation of the diastereoselectivities of five- and six-membered ring ketones bearing O and S, C and S, and C and O substituents at the  $\alpha$ -carbon  
AU Yadav, V. K.; Sriramurthy, V.  
CS Department of Chemistry, Indian Institute of Technology, Kanpur, 208 016, India  
SO Tetrahedron (2001), 57(18), 3987-3995  
CODEN: TETRAB; ISSN: 0040-4020  
PB Elsevier Science Ltd.  
DT Journal  
LA English  
AB The steric effects in the geometry on cation-chelation predict the exptl.  $\pi$ -selectivity of 1-oxa-4-thiaspiro[4.5] **decan-6-one**, 1-oxa-4-thiaspiro[4.4] **nonan-6-one**, 1-thiaspiro[4.4] **nonan-6-one**, and 1-oxaspiro[4.4] **nonan-6-one**. The reversal in the selectivity of 1-oxa-4-thiaspiro[4.4] **nonan-6-one** on reduction with (i-Bu)2AlH appears to be a direct consequence of the steric interactions arising from the large i-Bu substituents. The antiperiplanar effects are not as significant as the steric effects. An ab initio MO investigation of the diastereoselectivities five- and six-membered ring ketones bearing O and S, C and S, and C and O substituents with the application of the cation-complexation model is described.

RE.CNT 72 THERE ARE 72 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L17 ANSWER 4 OF 34 CAPLUS COPYRIGHT 2004 ACS on STN  
AN 2001:167218 CAPLUS  
DN 135:19208  
TI Alkoxy radical accelerated  $\beta$ -fragmentation of alcohols and lactols  
AU Rigby, J. H.; Payen, A.; Warshakoon, N.  
CS Department of Chemistry, Wayne State University, Detroit, MI, 48202, USA  
SO Tetrahedron Letters (2001), 42(11), 2047-2049  
CODEN: TELEAY; ISSN: 0040-4039  
PB Elsevier Science Ltd.  
DT Journal  
LA English  
OS CASREACT 135:19208  
AB Treatment of alcs. and lactols with Pb(OAc)<sub>4</sub>/Cu(OAc)<sub>2</sub> in refluxing benzene provides the corresponding  $\delta$ -unsatd. carbonyl products.  
RE.CNT 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L17 ANSWER 5 OF 34 CAPLUS COPYRIGHT 2004 ACS on STN  
AN 2001:44773 CAPLUS  
DN 134:252253  
TI Asymmetric Baeyer-Villiger Oxidations of 4-Mono- and 4,4-Disubstituted Cyclohexanones by Whole Cells of Engineered Escherichia coli  
AU Mihovilovic, Marko D.; Chen, Gang; Wang, Shaozhao; Kyte, Brian; Rochon, Fernande; Kayser, Margaret M.; Stewart, Jon D.  
CS Departments of Chemistry, University of New Brunswick, Saint John, NB, E2L 4L5, Can.  
SO Journal of Organic Chemistry (2001), 66(3), 733-738  
CODEN: JOCEAH; ISSN: 0022-3263  
PB American Chemical Society  
DT Journal  
LA English

OS CASREACT 134:252253

AB Whole cells of an Escherichia coli strain that overexpresses Acinetobacter sp. NCIB 9871 cyclohexanone monooxygenase have been used for the Baeyer-Villiger oxidns. of a variety of 4-mono- and 4,4-disubstituted cyclohexanones. In cases where comparisons were possible, this new biocatalytic reagent provided lactones with chemical yields and optical purities that were comparable to those obtained from the purified enzyme or a strain of bakers' yeast that expresses the same enzyme. The efficient production of cyclohexanone monooxygenase in the E. coli expression system (ca. 30% of total soluble protein) allowed these oxidns. to reach completion in approx. half the time required for the engineered bakers' yeast strain. Surprisingly, 4,4-disubstituted cyclohexanones were also accepted by the enzyme, and the enantioselectivities of these oxidns. could be rationalized by considering the conformational energies of bound substrates along with the enzyme's intrinsic enantioselectivity. The enzyme expressed in E. coli cells also oxidized several 4-substituted cyclohexanones bearing polar substituents, often with high enantioselectivities. In the case of 4-iodocyclohexanone, the lactone was obtained in >98% ee and its absolute configuration was assigned by X-ray crystallog. Taken together, these results demonstrate the utility of an engineered bacterial strain in delivering useful chiral building blocks in an exptl. simple manner.

RE.CNT 39 THERE ARE 39 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L17 ANSWER 6 OF 34 CAPLUS COPYRIGHT 2004 ACS on STN

AN 1998:753968 CAPLUS

DN 130:138978

TI Conversion of spirolactones to enones over Zeolite Y: a computational study

AU Chatterjee, A.; Vetrivel, R.; Sreekumar, R.; Murthy, Y. V. S. N.; Pillai, C. N.

CS Catalysis Division, National Chemical Laboratory, Pune, 411 008, India

SO Catalysis: Modern Trends, [Papers presented at the National Symposium on Catalysis], 12th Bombay, Dec. 19-22, 1994 (1996), Meeting Date 1994, 68-71. Editor(s): Gupta, N. M.; Chakrabarty, Dipak K. Publisher: Narosa, New Delhi, India.

CODEN: 66ZZAC

DT Conference

LA English

AB Various zeolites were reported as catalysts for the conversion of spirolactones to polycyclic enones. Computer-simulation techniques such as computer graphics, force-field calcns. and mol. fitting were used for understanding this novel reaction in HY. Force-field calcns. adopted for the mols. involved in the reaction indicate the geometry and conformational flexibility of these mols. Possible orientations of the reactant and product mols. in the 12-member window to the super cage of Zeolite Y as well as fitting of these mols. were tried.

RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L17 ANSWER 7 OF 34 CAPLUS COPYRIGHT 2004 ACS on STN

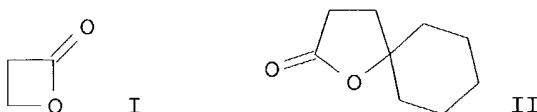
AN 1998:584726 CAPLUS

DN 129:290028

TI A new coupling reaction between  $\beta$ -lactones and electrophiles mediated by a SmI<sub>2</sub>/(NiI<sub>2</sub> catalytic) system

AU Machrouhi, Fouzia; Namy, Jean-Louis

CS Laboratoire des Reactions Organiques Selectives, Institut de Chimie  
Moleculaire d'Orsay, associe au CNRS, Universite Paris-Sud, Orsay, 91405,  
Fr.  
SO Tetrahedron (1998), 54(37), 11111-11122  
CODEN: TETRAB; ISSN: 0040-4020  
PB Elsevier Science Ltd.  
DT Journal  
LA English  
OS CASREACT 129:290028  
GI



AB  $\beta$ -Lactones react with ketones, aldehydes, and imines in the presence of a SmI<sub>2</sub>/(NiI<sub>2</sub> catalytic) system to afford substituted tetrahydrofuranones and pyrrolidinones. For example, reaction of  $\beta$ -propiolactone (I) with cyclohexanone in THF containing SmI<sub>2</sub> and NiI<sub>2</sub> at room temp for 60 min gave, after acid catalyzed hydrolysis, the **oxaspiro[4.5]decanone** II.

RE.CNT 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L17 ANSWER 8 OF 34 CAPLUS COPYRIGHT 2004 ACS on STN  
AN 1998:450866 CAPLUS  
DN 129:161483  
TI Spiro  $\gamma$ -lactones via aluminum enolate-spiro epoxide openings  
AU Taylor, Stephen K.; Chmiel, Nikolas H.; Mann, Emily E.; Silver, Michael E.; Vyvyan, James R.  
CS Department Chemistry, Hope College, Holland, MI, 49422, USA  
SO Synthesis (1998), (7), 1009-1014  
CODEN: SYNTBF; ISSN: 0039-7881  
PB Georg Thieme Verlag  
DT Journal  
LA English  
OS CASREACT 129:161483  
AB The opening of several spiro epoxides by Al ester enolates is described. The isolated  $\gamma$ -hydroxy esters are cyclized to the corresponding spiro lactones with high efficiency. Alternatively, the crude product from epoxide opening may be directly converted to the spiro lactone without purification of the intermediate hydroxy ester. This methodol. provides another complementary route to 1-**oxaspiro[4.n]-2-one** systems that are of structural and biol. interest.

L17 ANSWER 9 OF 34 CAPLUS COPYRIGHT 2004 ACS on STN  
AN 1998:168206 CAPLUS  
DN 128:257069  
TI Computer simulation study on the conversion of spirolactone to enones over H-Y zeolite  
AU Chatterjee, A.; Iwasaki, T.; Ebina, T.; Vetrivel, R.  
CS Inorganic Material Section, Tohoku National Industrial Research Institute, AIST, Sendai, 983, Japan

SO Journal of Molecular Graphics & Modelling (1998), Volume Date 1997, 15(4),  
216-220, 259  
CODEN: JMGMFI; ISSN: 1093-3263  
PB Elsevier Science Inc.  
DT Journal  
LA English  
AB We report here the results of computer modeling studies and quantum chemical calcns. on the spiro lactone-to-enone conversion reaction over the zeolite catalysts, especially H-Y zeolite. We studied the adsorption mode of the mols. inside the supercage of H-Y and the mechanism of electron transfer between organic mols. and the framework of zeolite H-Y by d. functional theory (DFT) calcns. Because the organic mols. considered in the present study are less sym. we docked the mol. inside the supercage of H-Y and energy minimization was then applied to these docked structures to yield representative low-energy binding sites for the mols. within the host structure. The interaction energy results show that the major interaction is between the methylene hydrogen of the mol. and the oxygen of the framework. The mol. electrostatic potential maps show that the ketonic oxygen of the reactant mols. abstract proton from Bronsted acid site. Thus the mechanism proposed by DFT calcn. matches well with the exptl. observations.

RE.CNT 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

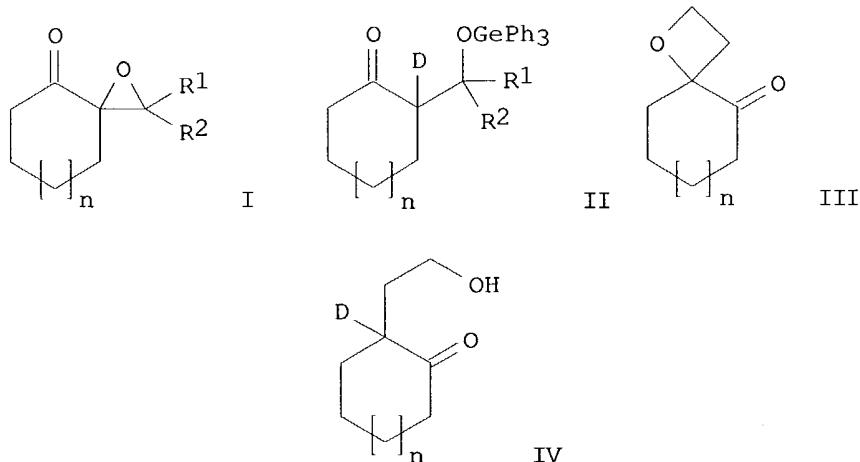
L17 ANSWER 10 OF 34 CAPLUS COPYRIGHT 2004 ACS on STN  
AN 1997:811848 CAPLUS  
DN 128:127658  
TI The structural fitting and the interaction energy between the zeolite lattice models and organic molecules in the conversion of spiro lactones to enones  
AU Chatterjee, A.; Vetrivel, R.; Sreekumar, R.; Murthy, Y. V. S. N.; Pillai, C. N.  
CS Nigatake, AIST, Inorganic Material Section, Tohoku National Industrial Research Institute, Miyagino-ku, Sendai 983, 4-2-1, Japan  
SO Journal of Molecular Catalysis A: Chemical (1997), 127(1-3), 153-162  
CODEN: JMCCF2; ISSN: 1381-1169  
PB Elsevier Science B.V.  
DT Journal  
LA English  
AB We report here the results of our modeling studies and cluster calcns. on the spiro lactone to enone conversion reaction over zeolite catalysts. The structural role and the interaction energy introduced by the zeolite framework in this reaction are studied. The shape selective catalytic behavior of various zeolites are rationalized by comparing the dimension of the mols. and zeolite pore diameter It is observed that the spiro lactone and enone mols. have dynamic freedom to hop among the various sites inside the supercage of zeolite-Y. The abstraction of proton at Bronsted acid site by ketonic oxygen of the reactant has been indicated as the first step in the reaction mechanism. The interaction energy of the mols. with the framework cluster and the electron redistribution occurring in the reactant mols. due to adsorption are discussed. These results are useful to understand the mechanism of the dehydration of spiro lactones to form enones.

RE.CNT 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L17 ANSWER 11 OF 34 CAPLUS COPYRIGHT 2004 ACS on STN  
AN 1997:533418 CAPLUS  
DN 127:220400  
TI Synthesis and applications of tetrahydrofuran-stable substituted (3-lithioxyalkyl)- and (4-lithioxyalkyl)lithiums, modified with magnesium 2-ethoxyethoxide  
AU Kostas, Ioannis D.; Screttas, Constantinos G.  
CS Natl. Hellenic Res. Foundation, Inst. Org. Pharm. Chem., Athens, 116 35, Greece  
SO Journal of Organic Chemistry (1997), 62(16), 5575-5577  
CODEN: JOCEAH; ISSN: 0022-3263  
PB American Chemical Society  
DT Journal  
LA English  
OS CASREACT 127:220400  
AB HO<sub>CR1R2</sub>(CH<sub>2</sub>)<sub>n</sub>CH<sub>2</sub>CH<sub>2</sub>SPh [I, R<sub>1</sub>R<sub>2</sub> = (CH<sub>2</sub>)<sub>m</sub>, m = 4-7; n = 0, 1] have been synthesized from HO<sub>CR1R2</sub>(CH<sub>2</sub>)<sub>n</sub>CH<sub>2</sub>:CH<sub>2</sub>. Regiospecific cleavage of the C-SPh bond of I by lithium dispersion in THF led to substituted (3-lithioxyalkyl)- and (4-lithioxyalkyl)lithiums, most of which share the  $\omega$  carbon with a carbocyclic ring. The organolithiums were modified with magnesium 2-ethoxyethoxide in order to suppress their reactivity toward THF cleavage, thus offering the advantage of preparing storable ethereal solution of certain types of (lithioxyalkyl)lithiums. This strategy appears to be of rather broad scope. The functionalized organolithiums prepared in this way react normally with electrophilic reagents with yields in the range 35-55%. Thus, carboxylations yielded lactones, some of which are natural products, while reactions with benzophenone and cyclic ketones yielded 1,4- and 1,5-diols.

RE.CNT 40 THERE ARE 40 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L17 ANSWER 12 OF 34 CAPLUS COPYRIGHT 2004 ACS on STN  
AN 1996:484646 CAPLUS  
DN 125:247962  
TI 1,5-Ph<sub>3</sub>Ge and 1,6-Bu<sub>3</sub>Sn group transfer from enoxy oxygen to alkoxy oxygen  
AU Kim, Sunggak; Do, Jung Yun; Lim, Kwang Min  
CS Dep. Chem., Korea Adv. Inst. Sci. Technol., Taejon, 305-701, S. Korea  
SO Chemistry Letters (1996), (8), 669-670  
CODEN: CMLTAG; ISSN: 0366-7022  
PB Nippon Kagakkai  
DT Journal  
LA English  
OS CASREACT 125:247962  
GI



AB 1,5-Ph<sub>3</sub>Ge and 1,6-Bu<sub>3</sub>Sn group transfer from enoxy O to alkoxy O are observed in radical reaction of keto epoxides and keto oxetanes, resp. E.g., reaction of keto epoxide I ( $n = 3$ , R<sub>1</sub> = R<sub>2</sub> = H) with Ph<sub>3</sub>GeD/AIBN in refluxing benzene gave adduct II in 91% yield, while keto oxetane III ( $n = 2$ ) reacted with Bu<sub>3</sub>SnD/AIBN under same conditions to give IV in approx. 81% yield.

L17 ANSWER 13 OF 34 CAPLUS COPYRIGHT 2004 ACS on STN

AN 1996:474775 CAPLUS

DN 125:195314

TI Palladium(II)-catalyzed formation of  $\gamma$ -butyrolactones from 4-trimethylsilyl-3-alkyn-1-ols: synthetic and mechanistic aspects

AU Compain, Philippe; Gore, Jacques; Vatele, Jean-Michel

CS Lab. Chimie Organique I, Univ. Claude Bernard, Villeurbanne, 69622, Fr.

SO Tetrahedron (1996), 52(31), 10405-10416

CODEN: TETRAB; ISSN: 0040-4020

PB Elsevier

DT Journal

LA English

OS CASREACT 125:195314

AB  $\gamma$ -Butyrolactones are obtained in good yields from 4-trimethylsilyl-3-alkyn-1-ols via Wacker-type oxidation reaction. A mechanism is proposed for this transformation: it involves two successive trans-hydroxypalladations followed by a [PdXSiMe<sub>3</sub>] syn-elimination and explains why the presence of the silyl group is essential in such a process.

L17 ANSWER 14 OF 34 CAPLUS COPYRIGHT 2004 ACS on STN

AN 1995:695076 CAPLUS

DN 123:339570

TI A new synthesis of lactones from tertiary alkenylcarbinols by cobalt-catalyzed photocarbonylation under ambient conditions

AU Chow, Yuan L.; Huang, Yu-Jin; Dragojlovic, Veljko

CS Dep. Chem., Simon Fraser Univ., Burnaby, BC, B5A 1S6, Can.

SO Canadian Journal of Chemistry (1995), 73(5), 740-2

CODEN: CJCHAG; ISSN: 0008-4042

PB National Research Council of Canada

DT Journal

LA English

OS CASREACT 123:339570

AB In the presence of a Co catalyst, tertiary vinyl-, propenyl-, and allylcarbinols are chelatively cycloadded to carbon monoxide to produce lactones by xanthone-sensitized photoreaction in THF, under CO at 1 atm and at room temperature. At lower temps., the isomerization of alkenyl-carbinols

was suppressed and lactones were obtained with improved selectivity. The photoprocess was facilitated by addition of pyridine or hydrogen and retarded in the presence of amines or phosphines. Mechanistic interpretations for the process and the accompanying effects are discussed.

L17 ANSWER 15 OF 34 CAPLUS COPYRIGHT 2004 ACS on STN

AN 1995:678965 CAPLUS

DN 123:313726

TI Improved enantioselection for chiral dirhodium(II) carboxamide-catalyzed carbon-hydrogen insertion reactions of tertiary alkyl diazoacetates

AU Doyle, Michael P.; Zhou, Qi-Lin; Raab, Conrad E.; Roos, Gregory H. P.

CS Dep. Chem., Trinity Univ., San Antonio, TX, 78212, USA

SO Tetrahedron Letters (1995), 36(27), 4745-8

CODEN: TELEAY; ISSN: 0040-4039

PB Elsevier

DT Journal

LA English

OS CASREACT 123:313726

AB Enantiocontrol in C-H insertion reactions of 3° alkyl diazoacetates, which is highly dependent on the catalyst ligand, is greatly enhanced with the use of dirhodium(II) catalysts such as tetrakis[methyl 1-acetylimidazolidin-2-one-4(S)-carboxylate], RH2(4S-MACIM)4. Thus, [(1-acetyl-2-oxo-4-imidazolidinecarboxylato-N3:O2)]dirhodium-catalyzed insertion reaction of diazoacetic acid 1-methylcyclopentyl ester gave *cis*-(*-*)-hexahydro-6a-methyl-2H-cyclopenta[b]furan-2-one and 1-oxaspiro[4.4]nonan-2-one in a 90:10 ratio in 85% overall yield. A similar product ratio was observed in the [(2-oxo-4-oxazolidinedinecarboxylato-N3:O2)]dirhodium-catalyzed insertion reaction.

L17 ANSWER 16 OF 34 CAPLUS COPYRIGHT 2004 ACS on STN

AN 1995:553885 CAPLUS

DN 122:314442

TI Spirolactones from Dirhodium(II)-Catalyzed Diazo Decomposition with Regioselective Carbon-Hydrogen Insertion

AU Doyle, Michael P.; Dyatkin, Alexey B.

CS Department of Chemistry, Trinity University, San Antonio, TX, 78212, USA

SO Journal of Organic Chemistry (1995), 60(10), 3035-8

CODEN: JOCEAH; ISSN: 0022-3263

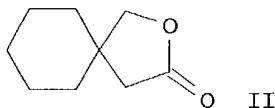
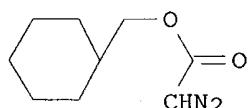
PB American Chemical Society

DT Journal

LA English

OS CASREACT 122:314442

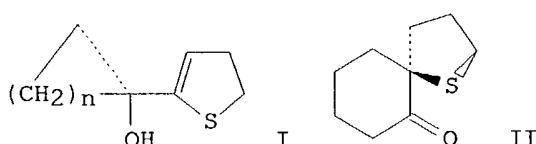
GI



AB Dirrhodium(II) caprolactamate, Rh<sub>2</sub>(cap)<sub>4</sub>, catalyzes diazo decomposition of cycloalkylmethyl diazoacetates, e.g., I, which form spirolactones, e.g., II, in moderate to high yield by insertion into a tertiary carbon-hydrogen bond. Similar results are obtained with diazoacetates derived from tetrahydropyran-2-methanol and tetrahydrofurfuryl alc. but not from cyclopropylmethanol. With tetrahydrofuran-3-ylmethyl diazoacetate, Rh<sub>2</sub>(cap)<sub>4</sub> catalysis promotes  $\delta$ -lactone formation via insertion into the oxygen-activated secondary C-H bond instead of  $\gamma$ -lactone formation by carbene insertion into the unactivated tertiary C-H bond. However, when both 1,5- and 1,6-positions are activated for insertion by adjacent oxygen atoms, as in (2,2-dimethyl-1,3-dioxolan-4-yl)methyl diazoacetate, five-membered ring formation occurs exclusively in Rh<sub>2</sub>(cap)<sub>4</sub>-catalyzed reactions, whereas use of dirhodium(II) acetate leads to both insertion products.

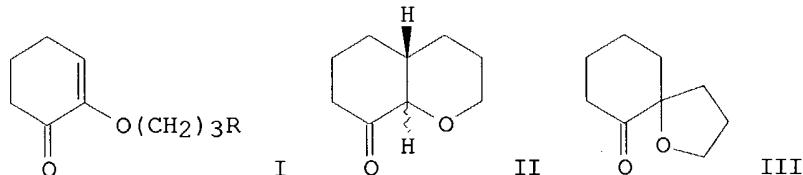
L17 ANSWER 17 OF 34 CAPLUS COPYRIGHT 2004 ACS on STN  
 AN 1995:270819 CAPLUS  
 DN 123:198598  
 TI A new synthesis of  $\gamma$ -butyrolactones via palladium(II)-catalyzed cyclization of trimethylsilylalkynes  
 AU Compain, Philippe; Vatele, Jean-Michel; Gore, Jacques  
 CS Laboratoire Chimie Organique 1, Universite Claude Bernard, Villeurbanne, 69622, Fr.  
 SO Synlett (1994), (11), 943-5  
 CODEN: SYNLES; ISSN: 0936-5214  
 PB Thieme  
 DT Journal  
 LA English  
 OS CASREACT 123:198598  
 AB In the presence of CuCl<sub>2</sub> and O<sub>2</sub>, palladium(II)-catalyzed cyclization of 1-substituted 4-(trimethylsilyl)-3-butyn-1-ols gave  $\gamma$ -butyrolactones in satisfactory yields (50-74%). The effect of exptl. parameters on the yield and on the reaction time was studied. The best results were obtained by using Pd(OAc)<sub>2</sub> or PdClNO<sub>2</sub>(CH<sub>3</sub>CN)<sub>2</sub> as catalysts and a mixture of CH<sub>3</sub>CN and 1N HCl as solvent. The palladium-catalyzed cyclization of (S)- $\alpha$ -[3-(trimethylsilyl)-2-propyn-1-yl]benzenemethanol gave (S)-dihydro-5-phenyl-2(3H)furanone (58% yield, >98% enantiomeric excess).

L17 ANSWER 18 OF 34 CAPLUS COPYRIGHT 2004 ACS on STN  
 AN 1994:269985 CAPLUS  
 DN 120:269985  
 TI Thionium ion-activated pinacol rearrangements. Generality and scope  
 AU Paquette, Leo A.; Dullweber, Uta; Branan, Bruce M.  
 CS Evans Chem. Lab., Ohio State Univ., Columbus, OH, 43210, USA  
 SO Heterocycles (1994), 37(1), 187-91  
 CODEN: HTCYAM; ISSN: 0385-5414  
 DT Journal  
 LA English  
 GI



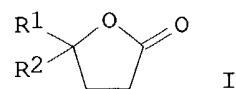
AB The acid-catalyzed rearrangement of tertiary allylic alcs. I ( $n = 3, 4, 5, 7, 11$ ), produced by the addition of 5-lithio-2,3-dihydrothiophene to cyclic ketones of various ring size, has been probed. Thus, I ( $n = 4$ ) rearranged to spirothiophene II.

L17 ANSWER 19 OF 34 CAPLUS COPYRIGHT 2004 ACS on STN  
 AN 1993:560069 CAPLUS  
 DN 119:160069  
 TI Radical cyclizations of diosphenol  $\omega$ -haloalkyl ethers to oxabicycloalkanones  
 AU Ponaras, Anthony A.; Zaim, Omer  
 CS Dep. Chem., Cathol. Univ. America, Washington, DC, 20064, USA  
 SO Tetrahedron Letters (1993), 34(18), 2879-82  
 CODEN: TELEAY; ISSN: 0040-4039  
 DT Journal  
 LA English  
 GI



AB Radical cyclization of diosphenol  $\omega$ -haloalkyl ethers gives spiro- and fused oxabicycloalkanones. Thus, (bomopropoxy)cyclohexenone I ( $R = Br$ ) was treated with  $Bu_3SnH$  in  $C_6H_6$  to give 33 and 7% the trans- and cis-oxabicyclohexanones II, 47% the spirocyclic ketone III, and less than 2% I ( $R = H$ ). A number of analogous cyclizations were studied and factors affecting the regiochem. and amount of cyclization vs. reduction are discussed.

L17 ANSWER 20 OF 34 CAPLUS COPYRIGHT 2004 ACS on STN  
 AN 1993:449159 CAPLUS  
 DN 119:49159  
 TI Samarium trichloride-catalyzed electrosynthesis of  $\gamma$ -butyrolactones from 3-chloro esters and carbonyl compounds  
 AU Hebri, Hassan; Dunach, Elisbet; Perichon, Jacques  
 CS Lab. Electrochim., CNRS, Thiais, 94320, Fr.  
 SO Journal of the Chemical Society, Chemical Communications (1993), (6), 499-500  
 CODEN: JCCCAT; ISSN: 0022-4936  
 DT Journal  
 LA English  
 OS CASREACT 119:49159  
 GI



AB Electrosynthesis of  $\gamma$ -butyrolactones I [R<sub>1</sub>R<sub>2</sub> = (CH<sub>2</sub>)<sub>5</sub>, (CH<sub>2</sub>)<sub>4</sub>; R<sub>1</sub> = n-C<sub>6</sub>H<sub>13</sub>, R<sub>2</sub> = Me, H; R<sub>1</sub> = PhCH<sub>2</sub>CH<sub>2</sub>, R<sub>2</sub> = Me; etc.] has been achieved by the direct reductive coupling of Et 3-chloropropionate and R<sub>1</sub>R<sub>2</sub>CO in the presence of a catalytic amount of SmCl<sub>3</sub>.

L17 ANSWER 21 OF 34 CAPLUS COPYRIGHT 2004 ACS on STN

AN 1992:651152 CAPLUS

DN 117:251152

TI Substituent-directed oxidative cyclization of  $\gamma$ -hydroxy olefins to  $\gamma$ -lactones with hexavalent chromium reagents

AU Baskaran, Sundarababu; Islam, Imadul; Chandrasekaran, Srinivasan

CS Dep. Org. Chem., Indian Inst. Sci., Bangalore, 560 012, India

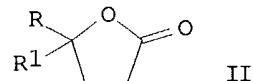
SO Journal of Chemical Research, Synopses (1992), (8), 290

CODEN: JRPSDC; ISSN: 0308-2342

DT Journal

LA English

GI



AB The oxidative cyclization of RR<sub>1</sub>CH(OH)CH<sub>2</sub>CH<sub>2</sub>CH:CR<sub>2</sub>R<sub>3</sub> [I; R = Me, Ph, PhCH<sub>2</sub>; R<sub>1</sub> = Me; RR<sub>1</sub> = (CH<sub>2</sub>)<sub>n</sub>, n = 4, 5; R<sub>3</sub>, R<sub>4</sub> = H, Me] to  $\gamma$ -lactones II with oxo-chromium(VI) reagents such as pyridinium chlorochromate or pyridinium dichromate was studied. The reaction is believed to proceed via the formation of a chromium ester which decomp. to give II. The mode of decomposition of the chromium ester appear to depend on the nature of the substitution of the I.

L17 ANSWER 22 OF 34 CAPLUS COPYRIGHT 2004 ACS on STN

AN 1992:531398 CAPLUS

DN 117:131398

TI A general methodology for the synthesis of linearly fused polyquinanes.

AU Murthy, Y. V. Suryanarayana; Pillai, C. Narayana

CS Dep. Chem., Indian Inst. Technol., Madras, 600 036, India

SO Tetrahedron (1992), 48(25), 5331-46

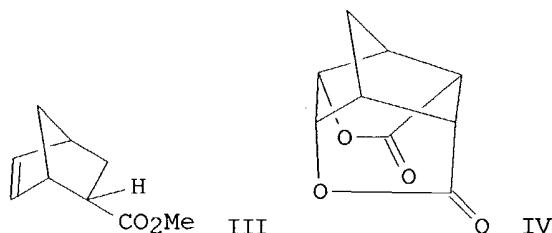
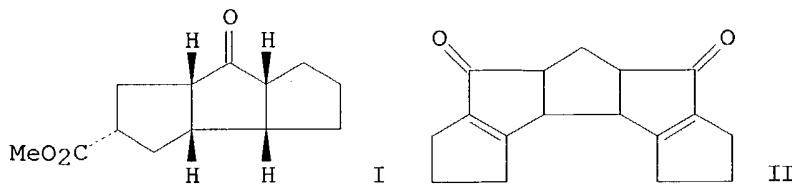
CODEN: TETRAB; ISSN: 0040-4020

DT Journal

LA English

OS CASREACT 117:131398

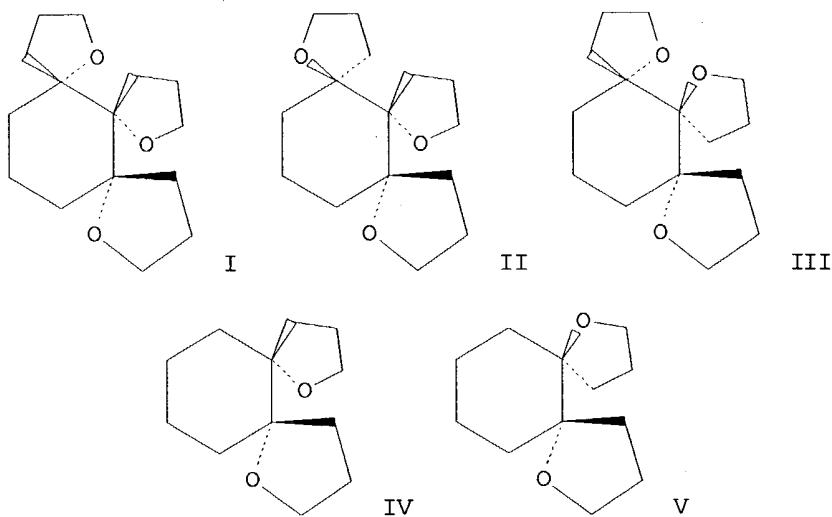
GI



AB A methodol. involving a combination of spiro-annulation by the action of 1,4-dibromomagnesiobutane on succinic acid derivs. followed by cyclization of the spirolactone using P2O5-CH3SO3H reagent was developed for the synthesis of polyquinanes. By using bicyclo[2.2.1]heptanecarboxylic acids I and II as the precursors for the spirolactones, triquinane III and pentaquinane IV were synthesized.

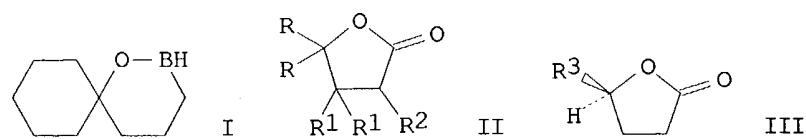
L17 ANSWER 23 OF 34 CAPLUS COPYRIGHT 2004 ACS on STN  
 AN 1991:632012 CAPLUS  
 DN 115:232012  
 TI Samarium diiodide promoted spirolactonization of cycloalkanones  
 AU Csuk, Rene; Hu, Zhong; Abdou, Mohamed; Kratky, Christoph  
 CS Pharm. Chem. Inst., Univ. Heidelberg, Heidelberg, D-W6900, Germany  
 SO Tetrahedron (1991), 47(34), 7037-44  
 CODEN: TETRAB; ISSN: 0040-4020  
 DT Journal  
 LA English  
 OS CASREACT 115:232012  
 GI For diagram(s), see printed CA Issue.  
 AB The reaction of cycloalkanones with Me 3-bromopropionate and SmI<sub>2</sub> afforded spiroannellated  $\gamma$ -lactones, e.g., I (n = 4-7), pinacols, and unprecedented hydroxycycloalkyloxaspiroalkanones II.

L17 ANSWER 24 OF 34 CAPLUS COPYRIGHT 2004 ACS on STN  
 AN 1991:429023 CAPLUS  
 DN 115:29023  
 TI Belted spirocyclic tetrahydrofurans - a new class of preorganized ionophoric polyethers. Molecular structure, conformation, and binding to alkali metal atoms  
 AU Negri, Joanna T.; Rogers, Robin D.; Paquette, Leo A.  
 CS Evans Chem. Lab., Ohio State Univ., Columbus, OH, 43210, USA  
 SO Journal of the American Chemical Society (1991), 113(13), 5073-5  
 CODEN: JACSAT; ISSN: 0002-7863  
 DT Journal  
 LA English  
 OS CASREACT 115:29023  
 GI



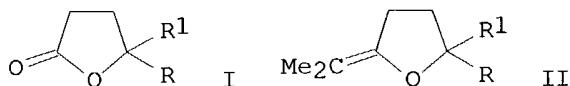
**AB** The preparation and ionophoric properties of spirocyclic tetrahydrofurans I-V are described. The syntheses make use of  $\alpha$ -heteroatom substitution to effect ring closure by the newly discovered associative SN reaction. The ground-state conformational preferences of the trispiro esters, established by x-ray crystallog., reflect the thermodn. importance of gauche C-O/C-O sigma bond interactions. The coordinative abilities of the ionophores toward alkali metal ions are respectable despite a relatively limited number of binding sites.

L17 ANSWER 25 OF 34 CAPLUS COPYRIGHT 2004 ACS on STN  
 AN 1991:429019 CAPLUS  
 DN 115:29019  
 TI A one-pot synthesis of racemic and enantiomeric  $\gamma$ -butyrolactones  
 AU Mandal, Arun K.; Mahajan, S. W.  
 CS Alchem. Res. Cent., Maharashtra, 400 601, India  
 SO Synthesis (1991), (4), 311-13  
 CODEN: SYNTBF; ISSN: 0039-7881  
 DT Journal  
 LA English  
 OS CASREACT 115:29019  
 GI



AB Borinate esters, e.g. I, derived from the hydroboration of homoallylic alcs. HOCHR<sub>2</sub>CR<sub>1</sub>CH<sub>2</sub>CHR<sub>2</sub>CH:CH<sub>2</sub> [R = Et, R<sub>1</sub> = R<sub>2</sub> = H; 2R = (CH<sub>2</sub>)<sub>5</sub>, R<sub>1</sub> = Me, R<sub>2</sub> = H, R<sub>1</sub> = H, R<sub>2</sub> = Me; 2R = (CH<sub>2</sub>)<sub>n</sub>, R<sub>1</sub> = R<sub>2</sub> = H, n = 4-7] and (R)-HOCHR<sub>3</sub>CH<sub>2</sub>CH:CH<sub>2</sub> (R<sub>3</sub> = Me, Et) were oxidized with chromic acid to provide a **one-pot** synthesis of the racemic and enantiomeric  $\gamma$ -butyrolactones (2-oxotetrahydrofurans) II and III.

- L17 ANSWER 26 OF 34 CAPLUS COPYRIGHT 2004 ACS on STN  
 AN 1991:121879 CAPLUS  
 DN 114:121879  
 TI The key role of water in the heterogeneous permanganate oxidation of  $\omega$ -hydroxy alkenes  
 AU Baskaran, Sundarababu; Islam, Imadul; Vankar, Padma S.; Chandrasekaran, Srinivasan  
 CS Dep. Org. Chem., Indian Inst. Sci., Bangalore, 560 012, India  
 SO Journal of the Chemical Society, Chemical Communications (1990), (23), 1670-1  
 CODEN: JCCCAT; ISSN: 0022-4936  
 DT Journal  
 LA English  
 OS CASREACT 114:121879  
 AB KMnO<sub>4</sub>-CuSO<sub>4</sub> in CH<sub>2</sub>Cl<sub>2</sub> containing a catalytic amount of H<sub>2</sub>O effects a smooth oxidative cyclization of  $\omega$ -hydroxy alkenes to  $\omega$ -lactones in good yields with the net loss of  $\geq 1$  C atoms in the process.
- L17 ANSWER 27 OF 34 CAPLUS COPYRIGHT 2004 ACS on STN  
 AN 1990:514968 CAPLUS  
 DN 113:114968  
 TI Oxidation of tetrahydrofuranmethanol derivatives with pyridinium chlorochromate: a facile synthesis of  $\gamma$ -butyrolactones  
 AU Baskaran, S.; Chandrasekaran, S.  
 CS Dep. Org. Chem., Indian Inst. Sci., Bangalore, 560 012, India  
 SO Tetrahedron Letters (1990), 31(19), 2775-8  
 CODEN: TELEAY; ISSN: 0040-4039  
 DT Journal  
 LA English  
 OS CASREACT 113:114968  
 AB Treatment of a number of tetrahydrofuranmethanol derivs. with pyridinium chlorochromate led to the formation of the corresponding  $\gamma$ -butyrolactones with the loss of **one** or more carbon atoms in good yields under mild reaction conditions.
- L17 ANSWER 28 OF 34 CAPLUS COPYRIGHT 2004 ACS on STN  
 AN 1990:76663 CAPLUS  
 DN 112:76663  
 TI A general approach to the synthesis of butanolides: synthesis of the sex pheromone of the Japanese beetle  
 AU Baskaran, Sundarababu; Islam, Imadul; Chandrasekaran, Srinivasan  
 CS Dep. Chem., Indian Inst. Technol., Kanpur, 208 016, India  
 SO Journal of Organic Chemistry (1990), 55(3), 891-5  
 CODEN: JOCEAH; ISSN: 0022-3263  
 DT Journal  
 LA English  
 OS CASREACT 112:76663  
 GI



AB Me2C:CHCH2CH2CRR1OH (R = vinyl, allyl, C.tplbond.CH, Et, CH2Ph, Ph, hexyl, R1 = Me; R = decynyl, R1 = H) and some related compds. were converted to butanolides I in very high yield via bromoetherification, elimination, and oxidative cleavage. The key step is the highly selective oxidative cleavage of enol ethers II with pyridinium chlorochromate under mild reaction conditions. The Japanese beetle pheromone, I [R = (Z)-decenyl, R1 = H] was prepared from I (R = decynyl, R1 = H).

L17 ANSWER 29 OF 34 CAPLUS COPYRIGHT 2004 ACS on STN

AN 1989:477910 CAPLUS

DN 111:77910

TI Carbon-carbon bond cleavage of 2-acylimidazolium salts in a sequence involving a new ester homoenolate equivalent. A synthesis of  $\gamma$ -lactones

AU Davies, D. Huw; Hall, Jonathan; Smith, Edward H.

CS ICI Pharm., Macclesfield/Cheshire, SK10 4TG, UK

SO Journal of the Chemical Society, Perkin Transactions 1: Organic and Bio-Organic Chemistry (1972-1999) (1989), (4), 837-8

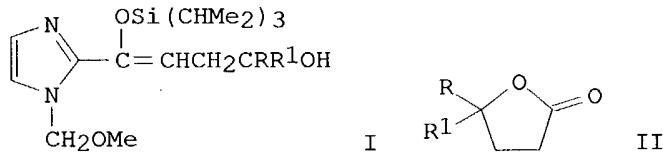
CODEN: JCPRB4; ISSN: 0300-922X

DT Journal

LA English

OS CASREACT 111:77910

GI



AB Reaction of the anion of 2-[1-(triisopropylsiloxy)allyl]-N-(methoxymethyl)imidazole with ketones and aldehydes proceeds regioselectivity to give silyl enol ethers I (R = Ph, CHMe2, R1 = H; R = Me, R1 = Me, CH2CHMe2; etc.) which are cleaved to  $\gamma$ -lactones II (same R, R1) after desilylation, N-methylation, and base treatment.

L17 ANSWER 30 OF 34 CAPLUS COPYRIGHT 2004 ACS on STN

AN 1989:212154 CAPLUS

DN 110:212154

TI The chemistry of small-ring compounds. Part 51. Electron-transfer-initiated oxidation of some cyclopropylidene compounds

AU Hofland, A.; De Boer, T. J.

CS Lab. Org. Chem., Univ. Amsterdam, Amsterdam, 1018 WS, Neth.

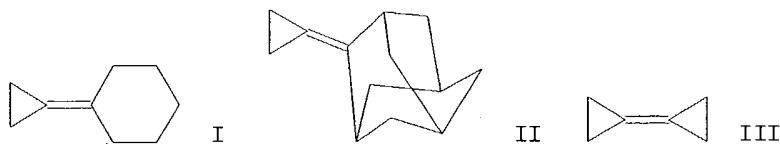
SO Recueil des Travaux Chimiques des Pays-Bas (1987), 106(11), 558-62

CODEN: RTCPA3; ISSN: 0165-0513

DT Journal

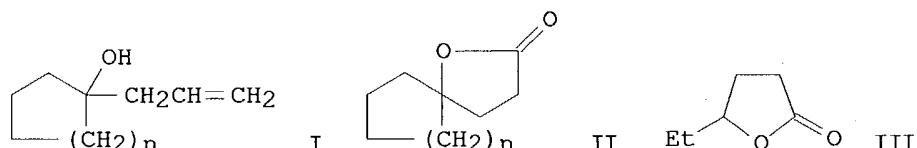
LA English

OS CASREACT 110:212154  
 GI



AB Cyclopropylidene compds. I, II, and III quench the fluorescence of 9,10-dicyanoanthracene (DCA). Nevertheless, photooxygenation in the presence of DCA does not give dioxetanes but (in MeOH) leads to a methoxy hydroperoxide, which undergoes acid rearrangement to a lactone or to a cyclobutanone, depending on the reaction conditions.

L17 ANSWER 31 OF 34 CAPLUS COPYRIGHT 2004 ACS on STN  
 AN 1989:38772 CAPLUS  
 DN 110:38772  
 TI Synthesis of  $\gamma$ -lactones by hydroboration-oxidation of homoallylic alcohols  
 AU Nguyen Cong Hao; Mavrov, M. V.; Chrelashvili, Z. G.; Serebryakov, E. P.  
 CS Inst. Org. Khim. im. Zelinskogo, Moscow, USSR  
 SO Izvestiya Akademii Nauk SSSR, Seriya Khimicheskaya (1988), (5), 1184-6  
 CODEN: IASKA6; ISSN: 0002-3353  
 DT Journal  
 LA Russian  
 OS CASREACT 110:38772  
 GI



AB One-pot hydroboration of tertiary homoallylic alcs., e.g., I ( $n = 1,2$ ), and then oxidation of the resulting organoboranes with chromic acid gave 60%  $\gamma$ -lactones, e.g., II ( $n = 1,2$ ). Extension of this method to EtCH:CHCHMeOAc gave 4-hexanolide (III), a component of the aggregation pheromone of skin beetles.

L17 ANSWER 32 OF 34 CAPLUS COPYRIGHT 2004 ACS on STN  
 AN 1963:39882 CAPLUS  
 DN 58:39882  
 OREF 58:6765e-g  
 TI Spirans. V. Diastereoisomeric grisenones obtained by oxidative cyclization  
 AU Dean, F. M.; Locksley, H. D.  
 CS Univ. Liverpool, UK  
 SO Journal of the Chemical Society, Abstracts (1963) 393-401  
 CODEN: JCSAAZ; ISSN: 0590-9791  
 DT Journal

LA Unavailable  
 GI For diagram(s), see printed CA Issue.  
 AB cf. CA 58, 2425b. Both (racemic) diastereoisomers of 4,5:2',3'-dibenzo-3-phenylgrisa-2',4'-dien-6'-one (I) have been made by oxidative cyclization of benzaldi- $\beta$ -naphthol (1,1'-benzylidenedi-2-naphthol) and have been assigned configurations by three methods. The discussion includes brief comments on the stereochemistry of the catechins and on the synthesis of unsym. xanthenes.

L17 ANSWER 33 OF 34 CAPLUS COPYRIGHT 2004 ACS on STN  
 AN 1963:39881 CAPLUS  
 DN 58:39881  
 OREF 58:6765b-e  
 TI Primary-secondary and primary-tertiary acetylenic glycols  
 AU Vartanyan, S. A.; Chukhadzhyan, G. A.; Melikyan, R. A.; Babanyan, Sh. A.  
 SO Izvestiya Akademii Nauk Armyanskoi SSR, Khimicheskie Nauki (1962), 15, 45-51  
 CODEN: IARKAZ; ISSN: 0367-6846  
 DT Journal  
 LA Russian  
 GI For diagram(s), see printed CA Issue.  
 AB cf. CA 58, 437g. A mixture of 0.5 mole acetylenic alc., 50 g. 32-35% H<sub>2</sub>CO in H<sub>2</sub>O, and 50 g. freshly prepared Cu<sub>2</sub>O catalyst was refluxed with stirring 10-15 hrs., the reaction product filtered, and, after removing H<sub>2</sub>O, the residue distilled in vacuo under N to give glycols with slight yellow color. In another procedure, the mixture of 0.4 mole paraformaldehyde, 0.4 mole acetylenic alc. or acetate, corresponding amount of catalyst, and 40-50 g. solvent was refluxed at 70-110° with stirring for 6-13 hrs., cooled, filtered, the solvent removed, and the residue distilled in vacuo. Thus were obtained RR'C(OH)C.tplbond.CCH<sub>2</sub>OH (R, R', % yield in cyclohexane, HCONMe<sub>2</sub>, xylene, and butanol, b.p./mm., n<sub>20</sub>D and d<sub>20</sub> given): Me, Me, 75 (55 from aqueous CH<sub>2</sub>O), 72, 60, 67.1, 132°/15, 1.4755, 1.040; Me, Et, 70.4 (52 from aqueous CH<sub>2</sub>O), 67.3, 63.5, --, 135°/15, 1.4790, 1.012; (RR' =) (CH<sub>2</sub>)<sub>4</sub>, 68.6 (60 from aqueous CH<sub>2</sub>O), 70.2, 64, 65, 156-8°/15, 1.5050, 1.1039; (RR' =) (CH<sub>2</sub>)<sub>5</sub>, 86 (68, aqueous CH<sub>2</sub>O), 80, 73, 72.7, --, --, --; (RR' =) CH<sub>2</sub>CH<sub>2</sub>OCMe<sub>2</sub>CH<sub>2</sub>, 58 (45, aqueous CH<sub>2</sub>O), 49, --, --, 175-7°/15, 1.4925, 1.1038; MeCH<sub>2</sub>CH<sub>2</sub>, H, 35, 25, --, --, 142°/15, 1.4730, 1.032. Also obtained were RR'C(OAc)C.tplbond.CCH<sub>2</sub>OH (R, R', % yield in cyclohexanone, n<sub>20</sub>D and d<sub>20</sub> given): Me, Me, 30, 140-7°/7, 1.471, 1.0709; (RR' =) (CH<sub>2</sub>)<sub>4</sub>, 47, 150-1°/5, 1.501, 1.1163; (RR' =) (CH<sub>2</sub>)<sub>5</sub>, 30, 155-7°/5, 1.503, 1.110. The acetylenic glycols and their acetates were hydrated by the method of Kucherov: glycol or its monoacetate (10 g.), 40 ml. H<sub>2</sub>O, and 2 g. HgSO<sub>4</sub> were mixed at room temperature 1 hr., the temperature increased to 60° over 2 hrs. with stirring and the mixture stirred 1 hr. at 80° gave I (R, R', % yield, b.p./mm., n<sub>20</sub>D, and d<sub>20</sub> given): Me, Me, 52, 138°/680, 1.4310, 0.990 (semicarbazone m. 180°); Me, Et, 55, 74-5°/25, 1.4370, 0.981 (semicarbazone m. 154-5°); (RR' =) (CH<sub>2</sub>)<sub>4</sub>, 38, 64°/3, 1.4710, 1.063 (dinitrophenylhydrazone m. 132-3°); (RR' =) (CH<sub>2</sub>)<sub>5</sub>, 60, 113-14°/25, 1.4768, 1.068 (semicarbazone m. 172-3°); (RR' =) CH<sub>2</sub>CH<sub>2</sub>OCMe<sub>2</sub>CH<sub>2</sub>, 30, 66°/1, 1.440, 0.996 (dinitrophenylhydrazone m. 107-8°). Catalyst can be used for several expts.

L17 ANSWER 34 OF 34 CAPLUS COPYRIGHT 2004 ACS on STN  
 AN 1960:110441 CAPLUS  
 DN 54:110441

OREF 54:21032h-i,21033a-c  
 TI Oxidation of unsymmetric tetra-and trisubstituted 3-furanidones with selenium dioxide  
 AU Korobitsyna, I. K.; Pivnitskii, K. K.; Yur'ev, Yu. K.  
 CS State Univ. Moscow  
 SO Zhurnal Obshchey Khimii (1959), 29, 3880-4  
 CODEN: ZOKHA4; ISSN: 0044-460X  
 DT Journal  
 LA Unavailable  
 AB cf. CA 52 4659i. Refluxing 30 g. 3-methyl-1-(1-hydroxycyclopentyl)-1-butyn-3-ol in 200 ml. H<sub>2</sub>O with 15 g. HgSO<sub>4</sub> suspended in 30 ml. H<sub>2</sub>O 4.5 hrs. gave 65.5% 2,2-dimethyl-5,5-tetramethylene-3-furanidone (I) mixed with the 4-isomer, b<sub>3</sub> 64.8-5.8° n<sub>20D</sub> 1.4583 d<sub>20</sub> 0.9708 which gave a mixture of 2,4-dinitrophenylhydrazones, separated by crystallization from MeOH-petr. ether to yield a 10:1 ratio of the more soluble isomer, m. 136-7°, and the less soluble isomer, m. 158.5-9.5°. Similarly 3-methyl-1-(1-hydroxycyclohexyl)-1-butyn-3-ol in 8 hrs. gave 80.5% 2,2-dimethyl-5,5-pentamethylene-3-furanidone (II), mixed with the 4-isomer, b<sub>3</sub> 71.5-2.2°, 1.4632, 0.9940, which gave the 2,2,4-dinitrophenylhydrazones, m. 159.2-9.3°, and m. 228.5-9.5°, in 4:1 ratio. 2-Methyl-5-phenyl-3-hexyne-2,5-diol in 15 hrs. gave 55.5% pure 2,2,5-trimethyl-5-phenyl-3-furanidone (III), b<sub>7</sub> 119.5-20°, 1.5083, 1.0406; 2,4-dinitrophenylhydrazone, m. 160-60.5°. The mixed I (16.8 g.) added over 0.5 hr. to a refluxing mixture of 14 g. SeO<sub>2</sub> in 10 ml. H<sub>2</sub>O and 200 ml. dioxane and the mixture refluxed 12 hrs. gave 82.5% 2,2-dimethyl-5,5-tetramethylenefuranidine-3,4-dione, b<sub>3</sub> 86-7°, m. 29.5-30°. In air this formed a colorless hydrate; dioxime decomposed 206-6.5°; quinoxaline derivative m. 106°. Mixed isomers of II gave 87.5% hygroscopic 2,2-dimethyl-5,5-pentamethylenefuranidine-3,4-dione, b<sub>4</sub> 98-100°, m. 68.5-70°; dioxime decomposed 187-8°, quinoxaline derivative m. 127°. III gave 84.5% 2,2,5-trimethyl-5-phenylfuranidine-3,4-dione, b<sub>2</sub> 110°, 1.5140, 1.1066, which could not be obtained in a completely pure state; heating with o-phenylenediamine gave the quinoxaline derivative, m. 73.1-4.6°.

=> log y			
COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION	
FULL ESTIMATED COST	204.39	672.12	
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION	
CA SUBSCRIBER PRICE	-38.81	-38.81	

STN INTERNATIONAL LOGOFF AT 09:24:41 ON 13 MAR 2004

Welcome to STN International! Enter x:x

LOGINID: ssspta1611sxp

PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

Enter NEWS followed by the item number or name to see news on that specific topic.

All use of STN is subject to the provisions of the STN Customer agreement. Please note that this agreement limits use to scientific research. Use for software development or design or implementation of commercial gateways or other similar uses is prohibited and may result in loss of user privileges and other penalties.

FILE 'HOME' ENTERED AT 09:34:57 ON 13 MAR 2004

=> file reg  
COST IN U.S. DOLLARS SINCE FILE TOTAL  
ENTRY SESSION  
FULL ESTIMATED COST 0.21 0.21

FILE 'REGISTRY' ENTERED AT 09:35:06 ON 13 MAR 2004  
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.  
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.  
COPYRIGHT (C) 2004 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 12 MAR 2004 HIGHEST RN 662722-88-5  
DICTIONARY FILE UPDATES: 12 MAR 2004 HIGHEST RN 662722-88-5

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 6, 2004

Please note that search-term pricing does apply when conducting SmartSELECT searches.

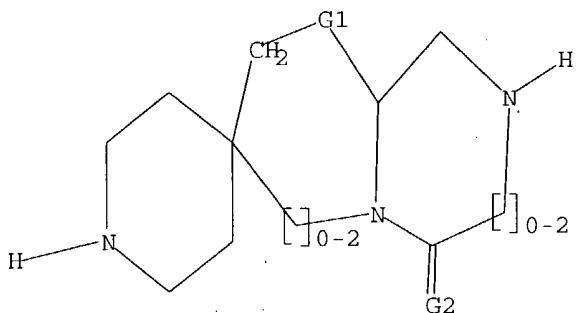
Crossover limits have been increased. See **HELP CROSSOVER** for details.

Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at:  
<http://www.cas.org/ONLINE/DBSS/registryss.html>

=> Uploading c:\program files\stnexp\queries\10026606.6

## L1 STRUCTURE UPLOADED

=> d l1  
L1 HAS NO ANSWERS  
L1 STR



G1 O, S, SO<sub>2</sub>, NH

G2 H<sub>2</sub>O<sub>2</sub>S

Structure attributes must be viewed using STN Express query preparation.

```
=> s 11 sss full
FULL SEARCH INITIATED 09:35:39 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED -      5031 TO ITERATE
```

100.0% PROCESSED 5031 ITERATIONS 0 ANSWERS  
SEARCH TIME: 00.00.01

L2 0 SEA SSS FUL L1

FILE 'MARPAT' ENTERED AT 09:35:46 ON 13 MAR 2004  
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.  
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.  
COPYRIGHT (C) 2004 American Chemical Society (ACS)

FILE CONTENT: 1988-PRESENT (VOL 140 ISS 10) (20040307/ED)

MOST RECENT CITATIONS FOR PATENTS FROM FIVE MAJOR ISSUING AGENCIES  
(COVERAGE TO THESE DATES IS NOT COMPLETE):

US	6683216	27	JAN	2004
DE	10317487	12	FEB	2004
EP	1388563	11	FEB	2004
JP	2004047131	12	FEB	2004
WO	2004011964	05	FEB	2004

Structure search limits have been raised. See HELP SLIMIT for the new, higher limits.

```
=> s 11 sss full
STRUCTURE TOO LARGE - SEARCH ENDED
A structure in your query is too large. You may delete
attributes or atoms to reduce the size of the structure
and try again.
```

10026606.1

Page 4

=> log Y  
COST IN U.S. DOLLARS  
FULL ESTIMATED COST

SINCE FILE ENTRY	TOTAL SESSION
0.42	156.05

STN INTERNATIONAL LOGOFF AT 09:36:08 ON 13 MAR 2004

Welcome to STN International! Enter x:x

LOGINID:ssspta1611sxp

PASSWORD:  
TERMINAL (ENTER 1, 2, 3, OR ?):2

\* \* \* \* \* \* \* \* \* Welcome to STN International \* \* \* \* \* \* \* \* \*

NEWS 1 Web Page URLs for STN Seminar Schedule - N. America  
NEWS 2 "Ask CAS" for self-help around the clock  
NEWS 3 SEP 09 CA/CAplus records now contain indexing from 1907 to the present  
NEWS 4 DEC 08 INPADOC: Legal Status data reloaded  
NEWS 5 SEP 29 DISSABS now available on STN  
NEWS 6 OCT 10 PCTFULL: Two new display fields added  
NEWS 7 OCT 21 BIOSIS file reloaded and enhanced  
NEWS 8 OCT 28 BIOSIS file segment of TOXCENTER reloaded and enhanced  
NEWS 9 NOV 24 MSDS-CCOHS file reloaded  
NEWS 10 DEC 08 CABA reloaded with left truncation  
NEWS 11 DEC 08 IMS file names changed  
NEWS 12 DEC 09 Experimental property data collected by CAS now available in REGISTRY  
NEWS 13 DEC 09 STN Entry Date available for display in REGISTRY and CA/CAplus  
NEWS 14 DEC 17 DGENE: Two new display fields added  
NEWS 15 DEC 18 BIOTECHNO no longer updated  
NEWS 16 DEC 19 CROPUS no longer updated; subscriber discount no longer available  
NEWS 17 DEC 22 Additional INPI reactions and pre-1907 documents added to CAS databases  
NEWS 18 DEC 22 IFIPAT/IFIUDB/IFICDB reloaded with new data and search fields  
NEWS 19 DEC 22 ABI-INFORM now available on STN  
NEWS 20 JAN 27 Source of Registration (SR) information in REGISTRY updated and searchable  
NEWS 21 JAN 27 A new search aid, the Company Name Thesaurus, available in CA/CAplus  
NEWS 22 FEB 05 German (DE) application and patent publication number format changes  
NEWS 23 MAR 03 MEDLINE and LMEDLINE reloaded  
NEWS 24 MAR 03 MEDLINE file segment of TOXCENTER reloaded  
NEWS 25 MAR 03 FRANCEPAT now available on STN  
  
NEWS EXPRESS MARCH 5 CURRENT WINDOWS VERSION IS V7.00A, CURRENT MACINTOSH VERSION IS V6.0b(ENG) AND V6.0Jb(JP), AND CURRENT DISCOVER FILE IS DATED 3 MARCH 2004  
NEWS HOURS STN Operating Hours Plus Help Desk Availability  
NEWS INTER General Internet Information  
NEWS LOGIN Welcome Banner and News Items  
NEWS PHONE Direct Dial and Telecommunication Network Access to STN  
NEWS WWW CAS World Wide Web Site (general information)

Enter NEWS followed by the item number or name to see news on that specific topic.

All use of STN is subject to the provisions of the STN Customer agreement. Please note that this agreement limits use to scientific research. Use for software development or design or implementation of commercial gateways or other similar uses is prohibited and may result in loss of user privileges and other penalties.

FILE 'HOME' ENTERED AT 09:37:10 ON 13 MAR 2004

FILE 'REGISTRY' ENTERED AT 09:37:19 ON 13 MAR 2004  
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.  
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.  
COPYRIGHT (C) 2004 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 12 MAR 2004 HIGHEST RN 662722-88-5  
DICTIONARY FILE UPDATES: 12 MAR 2004 HIGHEST RN 662722-88-5

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 6, 2004

Please note that search-term pricing does apply when conducting SmartSELECT searches.

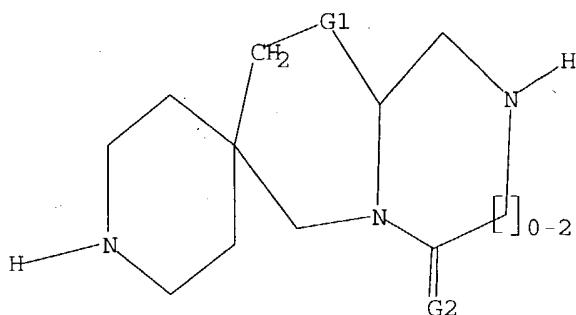
Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at:  
<http://www.cas.org/ONLINE/DBSS/registryss.html>

=> Uploading c:\program files\stnexp\queries\10026606.7

## L1 STRUCTURE UPLOADED

=> d 11  
L1 HAS NO ANSWERS  
L1 STR



G1 O, S, SO<sub>2</sub>, NH

G2 H<sub>2</sub>O, S

Structure attributes must be viewed using STN Express query preparation.

=> s 11 sss full  
FULL SEARCH INITIATED 09:37:42 FILE 'REGISTRY'  
FULL SCREEN SEARCH COMPLETED - 1433 TO ITERATE

100.0% PROCESSED 1433 ITERATIONS 0 ANSWERS  
SEARCH TIME: 00.00.01

L2 0 SEA SSS FUL L1

FILE 'MARPAT' ENTERED AT 09:37:48 ON 13 MAR 2004  
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.  
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.  
COPYRIGHT (C) 2004 American Chemical Society (ACS)

FILE CONTENT: 1988-PRESENT (VOL 140 ISS 10) (20040307/ED)

MOST RECENT CITATIONS FOR PATENTS FROM FIVE MAJOR ISSUING AGENCIES  
(COVERAGE TO THESE DATES IS NOT COMPLETE):

US	6683216	27	JAN	2004
DE	10317487	12	FEB	2004
EP	1388563	11	FEB	2004
JP	2004047131	12	FEB	2004
WO	2004011964	05	FEB	2004

Structure search limits have been raised. See HELP SLIMIT for the new, higher limits.

```
=> S 11 SSS FULL  
FULL SEARCH INITIATED 09:37:57 FILE 'MARPAT'  
FULL SCREEN SEARCH COMPLETED -      272 TO ITERATE
```

100.0% PROCESSED      272 ITERATIONS      0 ANSWERS

10026606.1

Page 4

SEARCH TIME: 00.00.05

L3 0 SEA SSS FUL L1

=> file caold

COST IN U.S. DOLLARS

FULL ESTIMATED COST

SINCE FILE ENTRY	TOTAL SESSION
109.42	265.05

FILE 'CAOLD' ENTERED AT 09:38:09 ON 13 MAR 2004

USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

COPYRIGHT (C) 2004 AMERICAN CHEMICAL SOCIETY (ACS)

FILE COVERS 1907-1966

FILE LAST UPDATED: 01 May 1997 (19970501/UP)

This file contains CAS Registry Numbers for easy and accurate substance identification. Title keywords, authors, patent assignees, and patent information, e.g., patent numbers, are now searchable from 1907-1966. TIFF images of CA abstracts printed between 1907-1966 are available in the PAGE display formats.

This file supports REGISTRY for direct browsing and searching of all substance data from the REGISTRY file. Enter HELP FIRST for more information.

=> s 11 sss full

**REGISTRY INITIATED**

Substance data SEARCH and crossover from CAS REGISTRY in progress...  
Use DISPLAY HITSTR (or FHITSTR) to directly view retrieved structures.

FULL SEARCH INITIATED 09:38:15 FILE 'REGISTRY'  
FULL SCREEN SEARCH COMPLETED - 1433 TO ITERATE

100.0% PROCESSED 1433 ITERATIONS  
SEARCH TIME: 00.00.01

0 ANSWERS

L4 0 SEA SSS FUL L1

L5 0 L4

=> log y

COST IN U.S. DOLLARS

FULL ESTIMATED COST

SINCE FILE ENTRY	TOTAL SESSION
0.42	421.31

STN INTERNATIONAL LOGOFF AT 09:38:21 ON 13 MAR 2004

10026606.1

Page 5

Patel

<3/13/2004>

Welcome to STN International! Enter x:x

LOGINID:ssspta1611sxp

PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

\* \* \* \* \* \* \* \* \* Welcome to STN International \* \* \* \* \* \* \* \* \*

NEWS 1 Web Page URLs for STN Seminar Schedule - N. America  
NEWS 2 "Ask CAS" for self-help around the clock  
NEWS 3 SEP 09 CA/CAplus records now contain indexing from 1907 to the present  
NEWS 4 DEC 08 INPADOC: Legal Status data reloaded  
NEWS 5 SEP 29 DISSABS now available on STN  
NEWS 6 OCT 10 PCTFULL: Two new display fields added  
NEWS 7 OCT 21 BIOSIS file reloaded and enhanced  
NEWS 8 OCT 28 BIOSIS file segment of TOXCENTER reloaded and enhanced  
NEWS 9 NOV 24 MSDS-CCOHS file reloaded  
NEWS 10 DEC 08 CABA reloaded with left truncation  
NEWS 11 DEC 08 IMS file names changed  
NEWS 12 DEC 09 Experimental property data collected by CAS now available in REGISTRY  
NEWS 13 DEC 09 STN Entry Date available for display in REGISTRY and CA/CAplus  
NEWS 14 DEC 17 DGENE: Two new display fields added  
NEWS 15 DEC 18 BIOTECHNO no longer updated  
NEWS 16 DEC 19 CROPUS no longer updated; subscriber discount no longer available  
NEWS 17 DEC 22 Additional INPI reactions and pre-1907 documents added to CAS databases  
NEWS 18 DEC 22 IFIPAT/IFIUDB/IFICDB reloaded with new data and search fields  
NEWS 19 DEC 22 ABI-INFORM now available on STN  
NEWS 20 JAN 27 Source of Registration (SR) information in REGISTRY updated and searchable  
NEWS 21 JAN 27 A new search aid, the Company Name Thesaurus, available in CA/CAplus  
NEWS 22 FEB 05 German (DE) application and patent publication number format changes  
NEWS 23 MAR 03 MEDLINE and LMEDLINE reloaded  
NEWS 24 MAR 03 MEDLINE file segment of TOXCENTER reloaded  
NEWS 25 MAR 03 FRANCEPAT now available on STN  
  
NEWS EXPRESS MARCH 5 CURRENT WINDOWS VERSION IS V7.00A, CURRENT MACINTOSH VERSION IS V6.0b(ENG) AND V6.0Jb(JP), AND CURRENT DISCOVER FILE IS DATED 3 MARCH 2004  
NEWS HOURS STN Operating Hours Plus Help Desk Availability  
NEWS INTER General Internet Information  
NEWS LOGIN Welcome Banner and News Items  
NEWS PHONE Direct Dial and Telecommunication Network Access to STN  
NEWS WWW CAS World Wide Web Site (general information)

Enter NEWS followed by the item number or name to see news on that specific topic.

All use of STN is subject to the provisions of the STN Customer agreement. Please note that this agreement limits use to scientific research. Use for software development or design or implementation of commercial gateways or other similar uses is prohibited and may result in loss of user privileges and other penalties.

FILE 'HOME' ENTERED AT 09:39:38 ON 13 MAR 2004

FILE 'REGISTRY' ENTERED AT 09:39:48 ON 13 MAR 2004  
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.  
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.  
COPYRIGHT (C) 2004 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 12 MAR 2004 HIGHEST RN 662722-88-5  
DICTIONARY FILE UPDATES: 12 MAR 2004 HIGHEST RN 662722-88-5

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 6, 2004

Please note that search-term pricing does apply when conducting SmartSELECT searches.

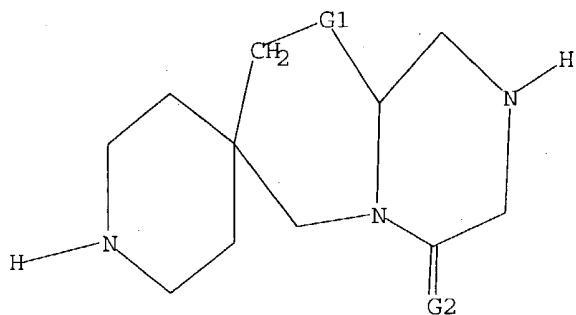
Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at:  
<http://www.cas.org/ONLINE/DBSS/registryss.html>

=> Uploading c:\program files\stnexp\queries\10026606.8

## L1 STRUCTURE UPLOADED

=> d 11  
L1 HAS NO ANSWERS  
L1 STR



G1 O,S,SO2,NH

G2 H,O,S

Structure attributes must be viewed using STN Express query preparation.

```
=> s 11 sss full
FULL SEARCH INITIATED 09:40:12 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 45 TO ITERATE
```

```
100.0% PROCESSED      45 ITERATIONS          0 ANSWERS
SEARCH TIME: 00.00.01
```

```
L2          0 SEA SSS FUL L1
```

=> file marpat		SINCE FILE	TOTAL
COST IN U.S. DOLLARS		ENTRY	SESSION
FULL ESTIMATED COST		155.42	155.63

```
FILE 'MARPAT' ENTERED AT 09:40:19 ON 13 MAR 2004
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2004 American Chemical Society (ACS)
```

FILE CONTENT: 1988-PRESENT (VOL 140 ISS 10) (20040307/ED)

MOST RECENT CITATIONS FOR PATENTS FROM FIVE MAJOR ISSUING AGENCIES  
(COVERAGE TO THESE DATES IS NOT COMPLETE):

```
US    6683216 27 JAN 2004
DE    10317487 12 FEB 2004
EP    1388563 11 FEB 2004
JP 2004047131 12 FEB 2004
WO 2004011964 05 FEB 2004
```

Structure search limits have been raised. See HELP SLIMIT for the new, higher limits.

```
=> s 11 sss full
FULL SEARCH INITIATED 09:40:25 FILE 'MARPAT'
FULL SCREEN SEARCH COMPLETED - 107 TO ITERATE
```

```
100.0% PROCESSED      107 ITERATIONS          0 ANSWERS
```

10026606.1

Page 4

SEARCH TIME: 00.00.01

L3 0 SEA SSS FUL L1

=> log y  
COST IN U.S. DOLLARS  
FULL ESTIMATED COST

SINCE FILE ENTRY	TOTAL SESSION
109.42	265.05

STN INTERNATIONAL LOGOFF AT 09:40:51 ON 13 MAR 2004

Welcome to STN International! Enter x:x

LOGINID: ssspta1611sxp

PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

\* \* \* \* \* \* \* \* \* \* Welcome to STN International \* \* \* \* \* \* \* \* \*

NEWS 1 Web Page URLs for STN Seminar Schedule - N. America  
NEWS 2 "Ask CAS" for self-help around the clock  
NEWS 3 SEP 09 CA/Cplus records now contain indexing from 1907 to the present  
NEWS 4 DEC 08 INPADOC: Legal Status data reloaded  
NEWS 5 SEP 29 DISSABS now available on STN  
NEWS 6 OCT 10 PCTFULL: Two new display fields added  
NEWS 7 OCT 21 BIOSIS file reloaded and enhanced  
NEWS 8 OCT 28 BIOSIS file segment of TOXCENTER reloaded and enhanced  
NEWS 9 NOV 24 MSDS-CCOHS file reloaded  
NEWS 10 DEC 08 CABAB reloaded with left truncation  
NEWS 11 DEC 08 IMS file names changed  
NEWS 12 DEC 09 Experimental property data collected by CAS now available in REGISTRY  
NEWS 13 DEC 09 STN Entry Date available for display in REGISTRY and CA/Cplus  
NEWS 14 DEC 17 DGENE: Two new display fields added  
NEWS 15 DEC 18 BIOTECHNO no longer updated  
NEWS 16 DEC 19 CROPU no longer updated; subscriber discount no longer available  
NEWS 17 DEC 22 Additional INPI reactions and pre-1907 documents added to CAS databases  
NEWS 18 DEC 22 IFIPAT/IFIUDB/IFICDB reloaded with new data and search fields  
NEWS 19 DEC 22 ABI-INFORM now available on STN  
NEWS 20 JAN 27 Source of Registration (SR) information in REGISTRY updated and searchable  
NEWS 21 JAN 27 A new search aid, the Company Name Thesaurus, available in CA/Cplus  
NEWS 22 FEB 05 German (DE) application and patent publication number format changes  
NEWS 23 MAR 03 MEDLINE and LMEDLINE reloaded  
NEWS 24 MAR 03 MEDLINE file segment of TOXCENTER reloaded  
NEWS 25 MAR 03 FRANCEPAT now available on STN  
  
NEWS EXPRESS MARCH 5 CURRENT WINDOWS VERSION IS V7.00A, CURRENT MACINTOSH VERSION IS V6.0b(ENG) AND V6.0Jb(JP), AND CURRENT DISCOVER FILE IS DATED 3 MARCH 2004  
NEWS HOURS STN Operating Hours Plus Help Desk Availability  
NEWS INTER General Internet Information  
NEWS LOGIN Welcome Banner and News Items  
NEWS PHONE Direct Dial and Telecommunication Network Access to STN  
NEWS WWW CAS World Wide Web Site (general information)

Enter NEWS followed by the item number or name to see news on that specific topic.

All use of STN is subject to the provisions of the STN Customer agreement. Please note that this agreement limits use to scientific research. Use for software development or design or implementation of commercial gateways or other similar uses is prohibited and may result in loss of user privileges and other penalties.

FILE 'HOME' ENTERED AT 09:42:40 ON 13 MAR 2004

FILE 'REGISTRY' ENTERED AT 09:42:49 ON 13 MAR 2004  
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.  
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.  
COPYRIGHT (C) 2004 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 12 MAR 2004 HIGHEST RN 662722-88-5  
DICTIONARY FILE UPDATES: 12 MAR 2004 HIGHEST RN 662722-88-5

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 6, 2004

Please note that search-term pricing does apply when conducting SmartSELECT searches.

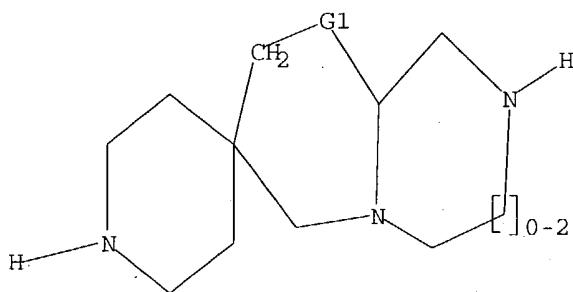
Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at:  
<http://www.cas.org/ONLINE/DBSS/registryss.html>

=>  
Uploading c:\program files\stnexp\queries\10026606.9

L1 STRUCTURE UPLOADED

=> d 11  
L1 HAS NO ANSWERS  
L1 STR



G1 O,S,SO2,NH

G2 H,O,S

Structure attributes must be viewed using STN Express query preparation.

```
=> s 11 sss full
FULL SEARCH INITIATED 09:43:12 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 1433 TO ITERATE
```

100.0% PROCESSED	1433 ITERATIONS	0 ANSWERS
SEARCH TIME: 00.00.01		

L2 0 SEA SSS FUL L1

=> file marpat	SINCE FILE	TOTAL
COST IN U.S. DOLLARS	ENTRY	SESSION
FULL ESTIMATED COST	155.42	155.63

FILE 'MARPAT' ENTERED AT 09:43:29 ON 13 MAR 2004  
 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.  
 PLEASE SEE "HELP USAGETERMS" FOR DETAILS.  
 COPYRIGHT (C) 2004 American Chemical Society (ACS)

FILE CONTENT: 1988-PRESENT (VOL 140 ISS 10) (20040307/ED)

MOST RECENT CITATIONS FOR PATENTS FROM FIVE MAJOR ISSUING AGENCIES  
 (COVERAGE TO THESE DATES IS NOT COMPLETE):

US	6683216	27 JAN 2004
DE	10317487	12 FEB 2004
EP	1388563	11 FEB 2004
JP	2004047131	12 FEB 2004
WO	2004011964	05 FEB 2004

Structure search limits have been raised. See HELP SLIMIT for the new,  
 higher limits.

```
=> s 11 sss full
FULL SEARCH INITIATED 09:43:36 FILE 'MARPAT'
FULL SCREEN SEARCH COMPLETED - 272 TO ITERATE
```

100.0% PROCESSED	272 ITERATIONS	0 ANSWERS
SEARCH TIME: 00.00.05		

10026606.1

Page 4

L3 0 SEA SSS FUL L1

=> log Y		
COST IN U.S. DOLLARS	SINCE FILE	TOTAL
FULL ESTIMATED COST	ENTRY	SESSION
	109.42	265.05

STN INTERNATIONAL LOGOFF AT 09:43:45 ON 13 MAR 2004

Welcome to STN International! Enter x:x

LOGINID:ssspta1611sxp

PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

\* \* \* \* \* \* \* \* \* Welcome to STN International \* \* \* \* \* \* \* \* \*

NEWS 1 Web Page URLs for STN Seminar Schedule - N. America  
NEWS 2 "Ask CAS" for self-help around the clock  
NEWS 3 SEP 09 CA/CAplus records now contain indexing from 1907 to the present  
NEWS 4 DEC 08 INPADOC: Legal Status data reloaded  
NEWS 5 SEP 29 DISSABS now available on STN  
NEWS 6 OCT 10 PCTFULL: Two new display fields added  
NEWS 7 OCT 21 BIOSIS file reloaded and enhanced  
NEWS 8 OCT 28 BIOSIS file segment of TOXCENTER reloaded and enhanced  
NEWS 9 NOV 24 MSDS-CCOHS file reloaded  
NEWS 10 DEC 08 CABA reloaded with left truncation  
NEWS 11 DEC 08 IMS file names changed  
NEWS 12 DEC 09 Experimental property data collected by CAS now available in REGISTRY  
NEWS 13 DEC 09 STN Entry Date available for display in REGISTRY and CA/CAplus  
NEWS 14 DEC 17 DGENE: Two new display fields added  
NEWS 15 DEC 18 BIOTECHNO no longer updated  
NEWS 16 DEC 19 CROPUS no longer updated; subscriber discount no longer available  
NEWS 17 DEC 22 Additional INPI reactions and pre-1907 documents added to CAS databases  
NEWS 18 DEC 22 IFIPAT/IFIUDB/IFICDB reloaded with new data and search fields  
NEWS 19 DEC 22 ABI-INFORM now available on STN  
NEWS 20 JAN 27 Source of Registration (SR) information in REGISTRY updated and searchable  
NEWS 21 JAN 27 A new search aid, the Company Name Thesaurus, available in CA/CAplus  
NEWS 22 FEB 05 German (DE) application and patent publication number format changes  
NEWS 23 MAR 03 MEDLINE and LMEDLINE reloaded  
NEWS 24 MAR 03 MEDLINE file segment of TOXCENTER reloaded  
NEWS 25 MAR 03 FRANCEPAT now available on STN  
  
NEWS EXPRESS MARCH 5 CURRENT WINDOWS VERSION IS V7.00A, CURRENT MACINTOSH VERSION IS V6.0b(ENG) AND V6.0Jb(JP), AND CURRENT DISCOVER FILE IS DATED 3 MARCH 2004  
NEWS HOURS STN Operating Hours Plus Help Desk Availability  
NEWS INTER General Internet Information  
NEWS LOGIN Welcome Banner and News Items  
NEWS PHONE Direct Dial and Telecommunication Network Access to STN  
NEWS WWW CAS World Wide Web Site (general information)

Enter NEWS followed by the item number or name to see news on that specific topic.

All use of STN is subject to the provisions of the STN Customer agreement. Please note that this agreement limits use to scientific research. Use for software development or design or implementation of commercial gateways or other similar uses is prohibited and may result in loss of user privileges and other penalties.

FILE 'HOME' ENTERED AT 09:45:16 ON 13 MAR 2004

FILE 'REGISTRY' ENTERED AT 09:45:28 ON 13 MAR 2004  
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.  
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.  
COPYRIGHT (C) 2004 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 12 MAR 2004 HIGHEST RN 662722-88-5  
DICTIONARY FILE UPDATES: 12 MAR 2004 HIGHEST RN 662722-88-5

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 6, 2004

Please note that search-term pricing does apply when conducting SmartSELECT searches.

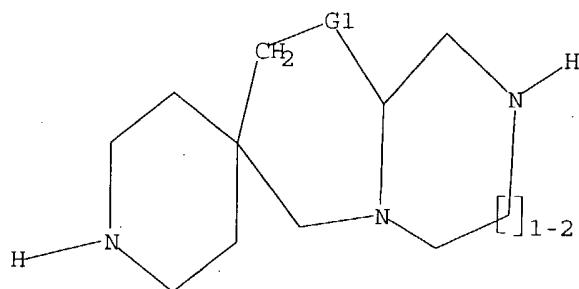
Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at:  
<http://www.cas.org/ONLINE/DBSS/registryss.html>

=>  
Uploading c:\program files\stnexp\queries\10026606.10

## L1 STRUCTURE UPLOADED

=> d 11  
L1 HAS NO ANSWERS  
L1 STR

G1 O,S,SO<sub>2</sub>,NH

G2 H,O,S

Structure attributes must be viewed using STN Express query preparation.

=&gt; s 11 ss full

COMBINATION OF STRUCTURE AND TEXT TERMS NOT VALID

The query entered contains both search terms created by structure-building or screen commands and text search terms. L#s created via the STRUCTURE or SCREEN commands must be searched in the structures files separately from text terms or profiles. The L# answer sets from structure searches can be used in crossover searches and can be combined with text terms.

=&gt; s 11 sss full

FULL SEARCH INITIATED 09:46:18 FILE 'REGISTRY'

FULL SCREEN SEARCH COMPLETED - 173 TO ITERATE

100.0% PROCESSED 173 ITERATIONS  
SEARCH TIME: 00.00.01

0 ANSWERS

L2 0 SEA SSS FUL L1

=&gt; file marpat

COST IN U.S. DOLLARS

	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	155.84	156.05

FILE 'MARPAT' ENTERED AT 09:46:26 ON 13 MAR 2004

USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

COPYRIGHT (C) 2004 American Chemical Society (ACS)

FILE CONTENT: 1988-PRESENT (VOL 140 ISS 10) (20040307/ED)

MOST RECENT CITATIONS FOR PATENTS FROM FIVE MAJOR ISSUING AGENCIES  
(COVERAGE TO THESE DATES IS NOT COMPLETE):

US 6683216 27 JAN 2004  
DE 10317487 12 FEB 2004  
EP 1388563 11 FEB 2004  
JP 2004047131 12 FEB 2004  
WO 2004011964 05 FEB 2004

Structure search limits have been raised. See HELP SLIMIT for the new, higher limits.

=> s 11 sss full  
 FULL SEARCH INITIATED 09:46:35 FILE 'MARPAT'  
 FULL SCREEN SEARCH COMPLETED - 188321 TO ITERATE

2.4% PROCESSED	4472 ITERATIONS	0 ANSWERS
4.8% PROCESSED	9058 ITERATIONS	0 ANSWERS
6.9% PROCESSED	13000 ITERATIONS	0 ANSWERS
10.6% PROCESSED	20049 ITERATIONS	0 ANSWERS
13.3% PROCESSED	24999 ITERATIONS	0 ANSWERS
15.4% PROCESSED	29076 ITERATIONS	0 ANSWERS
19.0% PROCESSED	35835 ITERATIONS	0 ANSWERS
21.9% PROCESSED	41149 ITERATIONS	0 ANSWERS
24.1% PROCESSED	45471 ITERATIONS	0 ANSWERS
27.5% PROCESSED	51865 ITERATIONS	0 ANSWERS
29.0% PROCESSED	54704 ITERATIONS	0 ANSWERS
29.9% PROCESSED	56340 ITERATIONS	0 ANSWERS
30.9% PROCESSED	58253 ITERATIONS	0 ANSWERS
31.5% PROCESSED	59363 ITERATIONS	0 ANSWERS
31.8% PROCESSED	59831 ITERATIONS	0 ANSWERS
31.9% PROCESSED	60000 ITERATIONS	0 ANSWERS
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)		
SEARCH TIME: 00.04.20		

FULL FILE PROJECTIONS: ONLINE \*\*INCOMPLETE\*\*  
 BATCH \*\*INCOMPLETE\*\*  
 PROJECTED ITERATIONS: 188321 TO 188321  
 PROJECTED ANSWERS: 0 TO 0

L3 0 SEA SSS FUL L1

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	113.62	269.67

STN INTERNATIONAL LOGOFF AT 09:52:57 ON 13 MAR 2004

Welcome to STN International! Enter x:x

LOGINID:ssspta1611sxp

PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

\* \* \* \* \* \* \* \* \* Welcome to STN International \* \* \* \* \* \* \* \* \*

NEWS 1 Web Page URLs for STN Seminar Schedule - N. America  
NEWS 2 "Ask CAS" for self-help around the clock  
NEWS 3 SEP 09 CA/CAplus records now contain indexing from 1907 to the present  
NEWS 4 DEC 08 INPADOC: Legal Status data reloaded  
NEWS 5 SEP 29 DISSABS now available on STN  
NEWS 6 OCT 10 PCTFULL: Two new display fields added  
NEWS 7 OCT 21 BIOSIS file reloaded and enhanced  
NEWS 8 OCT 28 BIOSIS file segment of TOXCENTER reloaded and enhanced  
NEWS 9 NOV 24 MSDS-CCOHS file reloaded  
NEWS 10 DEC 08 CABA reloaded with left truncation  
NEWS 11 DEC 08 IMS file names changed  
NEWS 12 DEC 09 Experimental property data collected by CAS now available in REGISTRY  
NEWS 13 DEC 09 STN Entry Date available for display in REGISTRY and CA/CAplus  
NEWS 14 DEC 17 DGENE: Two new display fields added  
NEWS 15 DEC 18 BIOTECHNO no longer updated  
NEWS 16 DEC 19 CROPU no longer updated; subscriber discount no longer available  
NEWS 17 DEC 22 Additional INPI reactions and pre-1907 documents added to CAS databases  
NEWS 18 DEC 22 IFIPAT/IFIUDB/IFICDB reloaded with new data and search fields  
NEWS 19 DEC 22 ABI-INFORM now available on STN  
NEWS 20 JAN 27 Source of Registration (SR) information in REGISTRY updated and searchable  
NEWS 21 JAN 27 A new search aid, the Company Name Thesaurus, available in CA/CAplus  
NEWS 22 FEB 05 German (DE) application and patent publication number format changes  
NEWS 23 MAR 03 MEDLINE and LMEDLINE reloaded  
NEWS 24 MAR 03 MEDLINE file segment of TOXCENTER reloaded  
NEWS 25 MAR 03 FRANCEPAT now available on STN  
  
NEWS EXPRESS MARCH 5 CURRENT WINDOWS VERSION IS V7.00A, CURRENT MACINTOSH VERSION IS V6.0b(ENG) AND V6.0Jb(JP), AND CURRENT DISCOVER FILE IS DATED 3 MARCH 2004  
NEWS HOURS STN Operating Hours Plus Help Desk Availability  
NEWS INTER General Internet Information  
NEWS LOGIN Welcome Banner and News Items  
NEWS PHONE Direct Dial and Telecommunication Network Access to STN  
NEWS WWW CAS World Wide Web Site (general information)

Enter NEWS followed by the item number or name to see news on that specific topic.

All use of STN is subject to the provisions of the STN Customer agreement. Please note that this agreement limits use to scientific research. Use for software development or design or implementation of commercial gateways or other similar uses is prohibited and may result in loss of user privileges and other penalties.

FILE 'HOME' ENTERED AT 10:32:28 ON 13 MAR 2004

FILE 'REGISTRY' ENTERED AT 10:32:40 ON 13 MAR 2004  
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.  
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.  
COPYRIGHT (C) 2004 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 12 MAR 2004 HIGHEST RN 662722-88-5  
DICTIONARY FILE UPDATES: 12 MAR 2004 HIGHEST RN 662722-88-5

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 6, 2004

Please note that search-term pricing does apply when conducting SmartSELECT searches.

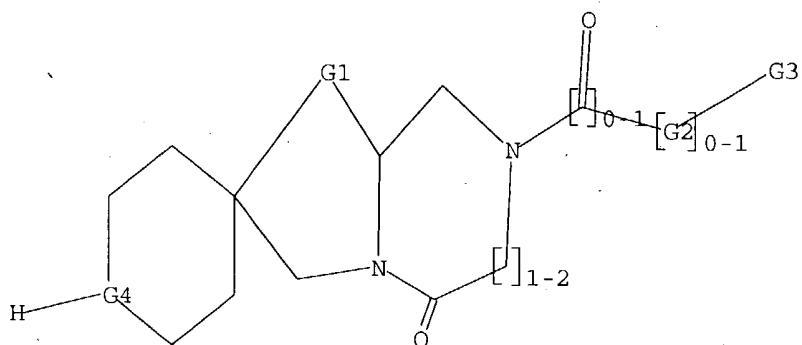
Crossover limits have been increased. See **HELP CROSSOVER** for details.

Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at:  
<http://www.cas.org/ONLINE/DBSS/registryss.html>

=>  
Uploading c:\program files\stnexp\queries\10026606.14

## L1 STRUCTURE UPLOADED

=> d 11  
L1 HAS NO ANSWERS  
L1 STR



G1 O,S,SO<sub>2</sub>,NH  
 G2 SO<sub>2</sub>,Ak  
 G3 Cb,Cy,Hy  
 G4 N,CH

Structure attributes must be viewed using STN Express query preparation.

```
=> s 11 sss full
FULL SEARCH INITIATED 10:33:06 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 1760 TO ITERATE

100.0% PROCESSED 1760 ITERATIONS
SEARCH TIME: 00.00.01
```

489 ANSWERS

L2 489 SEA SSS FUL L1

=> file marpat		SINCE FILE	TOTAL
COST IN U.S. DOLLARS		ENTRY	SESSION
FULL ESTIMATED COST		155.42	155.63

FILE 'MARPAT' ENTERED AT 10:33:18 ON 13 MAR 2004
 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
 PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
 COPYRIGHT (C) 2004 American Chemical Society (ACS)

FILE CONTENT: 1988-PRESENT (VOL 140 ISS 10) (20040307/ED)

MOST RECENT CITATIONS FOR PATENTS FROM FIVE MAJOR ISSUING AGENCIES
 (COVERAGE TO THESE DATES IS NOT COMPLETE):

US	6683216	27 JAN 2004
DE	10317487	12 FEB 2004
EP	1388563	11 FEB 2004
JP	2004047131	12 FEB 2004
WO	2004011964	05 FEB 2004

Structure search limits have been raised. See HELP SLIMIT for the new, higher limits.

=> s 11 sss full

STRUCTURE TOO LARGE - SEARCH ENDED

A structure in your query is too large. You may delete attributes or atoms to reduce the size of the structure and try again.

=> file caplus	SINCE FILE	TOTAL
COST IN U.S. DOLLARS	ENTRY	SESSION
FULL ESTIMATED COST	0.42	156.05

FILE 'CAPLUS' ENTERED AT 10:33:32 ON 13 MAR 2004  
 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.  
 PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

COPYRIGHT (C) 2004 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 13 Mar 2004 VOL 140 ISS 12  
 FILE LAST UPDATED: 12 Mar 2004 (20040312/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s 12  
 L3 2 L2

=> d his

(FILE 'HOME' ENTERED AT 10:32:28 ON 13 MAR 2004)

FILE 'REGISTRY' ENTERED AT 10:32:40 ON 13 MAR 2004  
 L1 STRUCTURE uploaded  
 L2 489 S L1 SSS FULL

FILE 'MARPAT' ENTERED AT 10:33:18 ON 13 MAR 2004

FILE 'CAPLUS' ENTERED AT 10:33:32 ON 13 MAR 2004  
 L3 2 S L2

=> d 14 fbib hitstr abs total  
 L4 NOT FOUND

The L-number entered has not been defined in this session, or it has been deleted. To see the L-numbers currently defined in this session, enter DISPLAY HISTORY at an arrow prompt (>).

=> d 13 fbib hitstr abs total

L3 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2004 ACS on STN

AN 2002:521746 CAPLUS  
 DN 137:93770

TI Preparation of tricyclic spiro compounds and cholesterol biosynthesis inhibitors containing them as the active ingredient

IN Nishida, Hidemitsu; Mukaihira, Takafumi  
 PA Mochida Pharmaceutical Co., Ltd., Japan  
 SO PCT Int. Appl., 311 pp.  
 CODEN: PIXXD2

DT Patent

LA Japanese

FAN CNT 2

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2002053568	A1	20020711	WO 2001-JP11656	20011228
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
EP 1346994	A1	20030924	JP 2000-399998 A	20001228
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR			EP 2001-272922	20011228
			JP 2000-399998 A	20001228
			WO 2001-JP11656W	20011228

#### PATENT FAMILY INFORMATION:

FAN 2001:31501

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2001002397	A1	20010111	WO 2000-JP4374	20000630
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
EP 1191028	A1	20020327	JP 1999-222883 A	19990630
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO			EP 2000-940912	20000630
			JP 1999-222883 A	19990630
BR 2000012093	A	20020716	WO 2000-JP4374	20000630
			BR 2000-12093	20000630
			JP 1999-222883 A	19990630
ZA 2001010558	A	20020912	WO 2000-JP4374	20000630
			ZA 2001-10558	20011221
			JP 1999-222883 A	19990630
US 2003045520	A1	20030306	US 2001-26606	20011227
			JP 1999-222883 A	19990630
			WO 2000-JP4374	A220000630
			JP 2000-399998 A	20001228

NO 2001006402 A 20020227

NO 2001-6402 20011228

JP 1999-222883 A 19990630

WO 2000-JP4374 W 20000630

OS MARPAT 137:93770

IT **441790-74-5P 441790-75-6P**

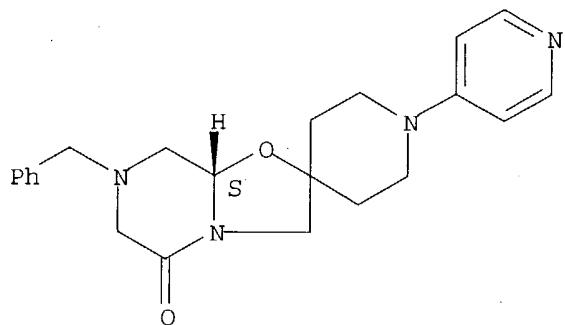
RL: PAC (Pharmacological activity); PUR (Purification or recovery); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(preparation of tricyclic spiro compds. as oxidosqualene cyclase inhibitors and cholesterol biosynthesis inhibitors for preventives and therapeutic agents)

RN 441790-74-5 CAPLUS

CN Spiro[5H-oxazolo[3,2-al]pyrazine-2(3H),4'-piperidin]-5-one, tetrahydro-7-(phenylmethyl)-1'-(4-pyridinyl)-, (8aS)- (9CI) (CA INDEX NAME)

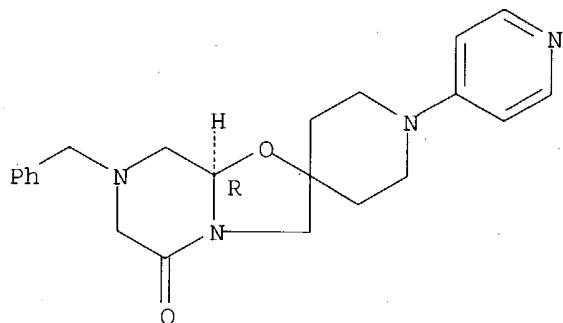
Absolute stereochemistry.



RN 441790-75-6 CAPLUS

CN Spiro[5H-oxazolo[3,2-al]pyrazine-2(3H),4'-piperidin]-5-one, tetrahydro-7-(phenylmethyl)-1'-(4-pyridinyl)-, (8aR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

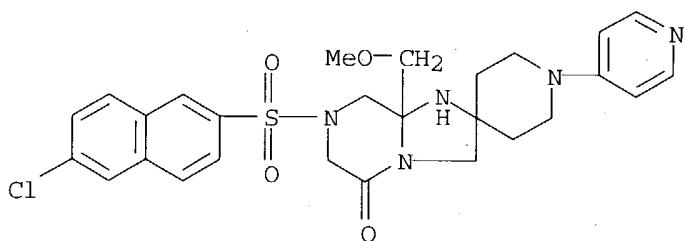
IT **318988-32-8P 441789-02-2P 441789-65-7P**

RL: PAC (Pharmacological activity); PUR (Purification or recovery); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of tricyclic spiro compds. as oxidosqualene cyclase inhibitors and cholesterol biosynthesis inhibitors for preventives and therapeutic agents)

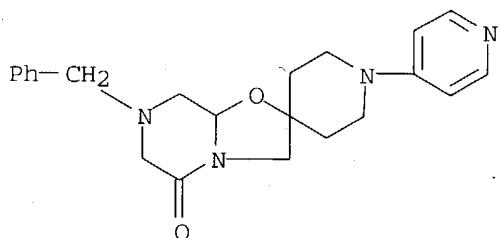
RN 318988-32-8 CAPLUS

CN Spiro[imidazo[1,2-a]pyrazine-2(3H),4'-piperidin]-5(1H)-one,  
7-[(6-chloro-2-naphthalenyl)sulfonyl]tetrahydro-8a-(methoxymethyl)-1'-(4-pyridinyl)- (9CI) (CA INDEX NAME)



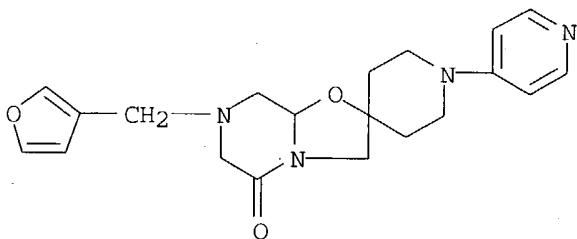
RN 441789-02-2 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
tetrahydro-7-(phenylmethyl)-1'-(4-pyridinyl)- (9CI) (CA INDEX NAME)



RN 441789-65-7 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
7-(3-furanyl methyl)tetrahydro-1'-(4-pyridinyl)- (9CI) (CA INDEX NAME)



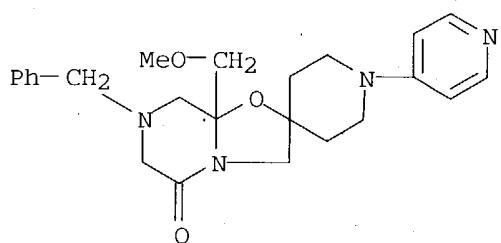
IT 441790-18-7P

RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(preparation of tricyclic spiro compds. as oxidosqualene cyclase inhibitors and cholesterol biosynthesis inhibitors for preventives and therapeutic

agents)

RN 441790-18-7 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
tetrahydro-8a-(methoxymethyl)-7-(phenylmethyl)-1'-(4-pyridinyl)- (9CI)  
(CA INDEX NAME)

IT 318986-22-0P 441788-65-4P 441788-66-5P  
 441788-67-6P 441788-68-7P 441788-69-8P  
 441788-70-1P 441788-71-2P 441788-72-3P  
 441788-73-4P 441788-74-5P 441788-75-6P  
 441788-76-7P 441788-78-9P 441788-79-0P  
 441788-80-3P 441788-81-4P 441788-82-5P  
 441788-83-6P 441788-85-8P 441788-86-9P  
 441788-87-0P 441788-88-1P 441788-89-2P  
 441788-90-5P 441788-91-6P 441788-92-7P  
 441788-93-8P 441788-94-9P 441788-97-2P  
 441788-98-3P 441789-00-0P 441789-01-1P  
 441789-03-3P 441789-05-5P 441789-06-6P  
 441789-07-7P 441789-08-8P 441789-10-2P  
 441789-11-3P 441789-12-4P 441789-13-5P  
 441789-14-6P 441789-16-8P 441789-17-9P  
 441789-22-6P 441789-24-8P 441789-28-2P  
 441789-29-3P 441789-30-6P 441789-31-7P  
 441789-32-8P 441789-33-9P 441789-35-1P  
 441789-36-2P 441789-37-3P 441789-38-4P  
 441789-39-5P 441789-40-8P 441789-41-9P  
 441789-42-0P 441789-43-1P 441789-44-2P  
 441789-46-4P 441789-47-5P 441789-49-7P  
 441789-50-0P 441789-51-1P 441789-52-2P  
 441789-53-3P 441789-54-4P 441789-56-6P  
 441789-57-7P 441789-58-8P 441789-59-9P  
 441789-60-2P 441789-61-3P 441789-62-4P  
 441789-63-5P 441789-64-6P 441789-66-8P  
 441789-67-9P 441789-68-0P 441789-69-1P  
 441789-70-4P 441789-71-5P 441789-72-6P  
 441789-73-7P 441789-74-8P 441789-75-9P  
 441789-78-2P 441789-79-3P 441789-80-6P  
 441789-81-7P 441789-82-8P 441789-83-9P  
 441789-84-0P 441789-85-1P 441789-86-2P  
 441789-87-3P 441789-88-4P 441789-89-5P  
 441789-90-8P 441789-91-9P 441789-92-0P  
 441789-93-1P 441789-94-2P 441789-95-3P  
 441789-96-4P 441789-97-5P 441789-98-6P  
 441789-99-7P 441790-00-7P 441790-01-8P  
 441790-02-9P 441790-03-0P 441790-04-1P  
 441790-05-2P 441790-06-3P 441790-07-4P

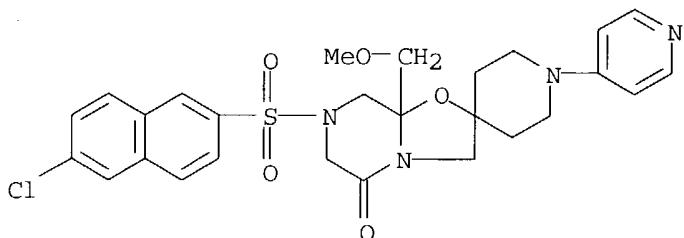
441790-08-5P 441790-09-6P 441790-10-9P  
441790-11-0P 441790-12-1P 441790-13-2P  
441790-14-3P 441790-15-4P 441790-16-5P  
441790-17-6P 441790-19-8P 441790-20-1P  
441790-21-2P 441790-86-9P 441790-87-0P  
441790-90-5P 441790-91-6P 441790-92-7P  
441790-93-8P 441790-94-9P 441790-95-0P  
441790-96-1P 441790-97-2P 441790-98-3P  
441790-99-4P 441791-00-0P 441791-01-1P  
441791-02-2P 441791-03-3P 441791-04-4P  
441791-05-5P 441791-06-6P 441791-07-7P  
441791-08-8P 441791-09-9P 441791-10-2P  
441791-11-3P 441791-12-4P 441791-13-5P  
441791-14-6P 441791-15-7P 441791-16-8P  
441791-19-1P 441791-20-4P 441791-21-5P  
441791-22-6P 441791-23-7P 441791-24-8P  
441791-25-9P 441791-26-0P 441791-27-1P  
441791-28-2P 441791-46-4P 441791-49-7P  
441791-52-2P 441791-53-3P 441791-60-2P  
441791-61-3P 441791-62-4P 441791-63-5P  
441791-64-6P 441791-65-7P 441791-68-0P  
441791-69-1P 441791-70-4P 441791-71-5P  
441791-72-6P 441791-73-7P 441791-74-8P  
441791-75-9P 441791-76-0P 441791-77-1P  
441791-78-2P 441791-79-3P 441791-80-6P  
441791-81-7P 441791-82-8P 441791-83-9P  
441791-84-0P 441791-85-1P 441791-86-2P  
441791-87-3P 441791-88-4P 441791-89-5P  
441791-90-8P 441791-91-9P 441791-92-0P  
441791-93-1P 441791-95-3P 441791-97-5P  
441791-98-6P 441791-99-7P 441792-00-3P  
441792-01-4P 441792-02-5P 441792-03-6P  
441792-04-7P 441792-05-8P 441792-06-9P  
441792-07-0P 441792-08-1P 441792-09-2P  
441792-10-5P 441792-11-6P 441792-12-7P  
441792-13-8P 441792-14-9P 441792-15-0P  
441792-16-1P 441792-17-2P 441792-18-3P  
441792-19-4P 441792-20-7P 441792-21-8P  
441792-22-9P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

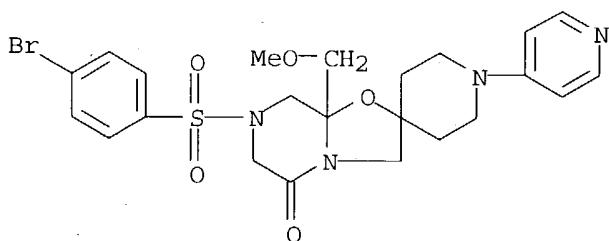
(preparation of tricyclic spiro compds. as oxidosqualene cyclase inhibitors and cholesterol biosynthesis inhibitors for preventives and therapeutic agents)

RN 318986-22-0 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
7-[(6-chloro-2-naphthalenyl)sulfonyl]tetrahydro-8a-(methoxymethyl)-1'-(4-pyridinyl)- (9CI) (CA INDEX NAME)



RN 441788-65-4 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
7-[(4-bromophenyl)sulfonyl]tetrahydro-8a-(methoxymethyl)-1'-(4-pyridinyl)-  
(9CI) (CA INDEX NAME)

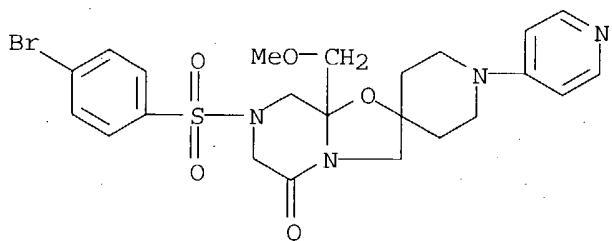
RN 441788-66-5 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
7-[(4-bromophenyl)sulfonyl]tetrahydro-8a-(methoxymethyl)-1'-(4-pyridinyl)-  
, monomethanesulfonate (9CI) (CA INDEX NAME)

CM 1

CRN 441788-65-4

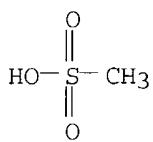
CMF C23 H27 Br N4 O5 S



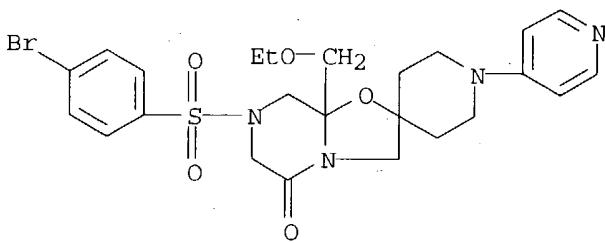
CM 2

CRN 75-75-2

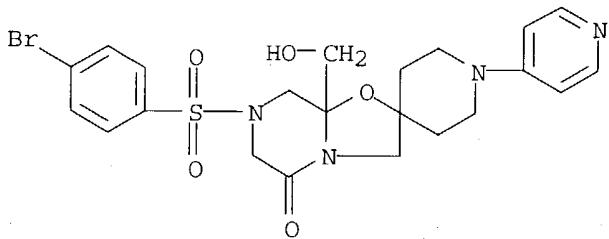
CMF C H4 O3 S



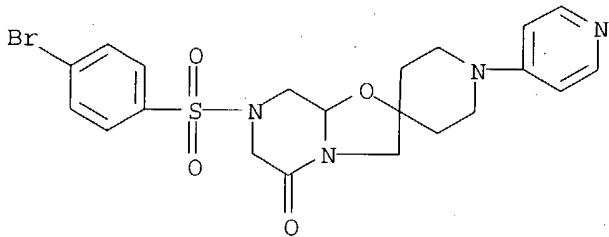
RN 441788-67-6 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
7-[(4-bromophenyl)sulfonyl]-8a-(ethoxymethyl)tetrahydro-1'-(4-pyridinyl)-  
(9CI) (CA INDEX NAME)

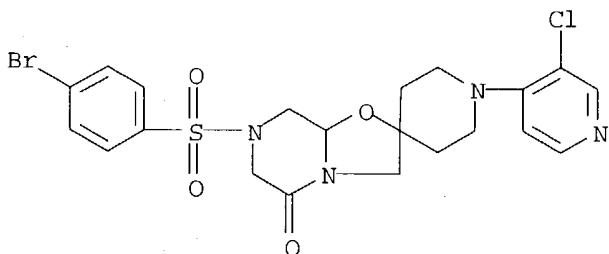
RN 441788-68-7 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
7-[(4-bromophenyl)sulfonyl]tetrahydro-8a-(hydroxymethyl)-1'-(4-pyridinyl)-  
(9CI) (CA INDEX NAME)

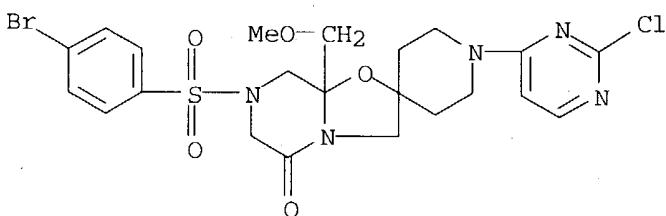
RN 441788-69-8 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
7-[(4-bromophenyl)sulfonyl]tetrahydro-1'-(4-pyridinyl)- (9CI) (CA INDEX  
NAME)

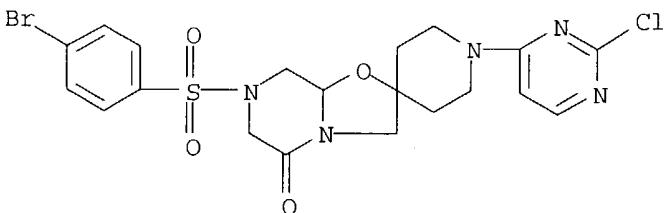
RN 441788-70-1 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
7-[(4-bromophenyl)sulfonyl]-1'-(3-chloro-4-pyridinyl)tetrahydro- (9CI)  
(CA INDEX NAME)

RN 441788-71-2 CAPLUS

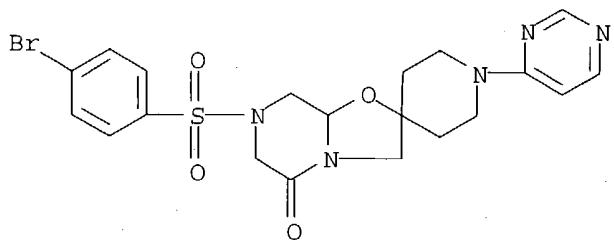
CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
7-[(4-bromophenyl)sulfonyl]-1'-(2-chloro-4-pyrimidinyl)tetrahydro-8a-  
(methoxymethyl)- (9CI) (CA INDEX NAME)

RN 441788-72-3 CAPLUS

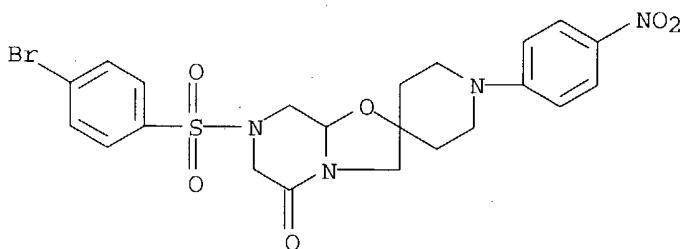
CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
7-[(4-bromophenyl)sulfonyl]-1'-(2-chloro-4-pyrimidinyl)tetrahydro- (9CI)  
(CA INDEX NAME)

RN 441788-73-4 CAPLUS

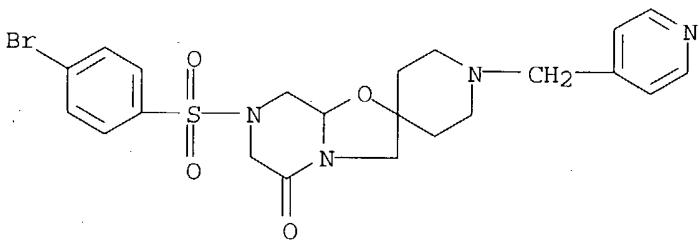
CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
7-[(4-bromophenyl)sulfonyl]tetrahydro-1'-(4-pyrimidinyl)- (9CI) (CA INDEX  
NAME)



RN 441788-74-5 CAPLUS

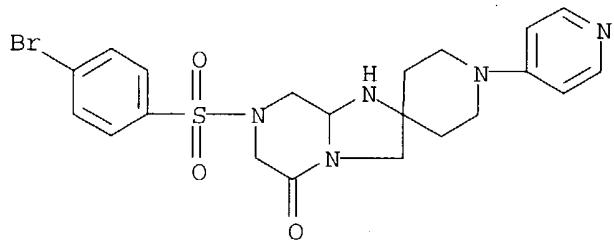
CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
7-[(4-bromophenyl)sulfonyl]tetrahydro-1'-(4-nitrophenyl)- (9CI) (CA INDEX  
NAME)

RN 441788-75-6 CAPLUS

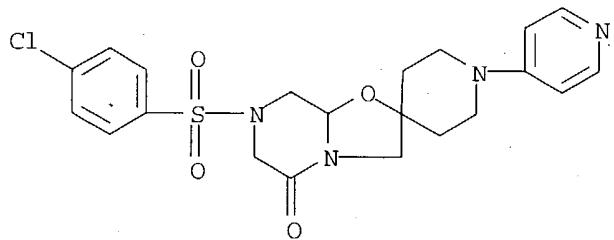
CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
7-[(4-bromophenyl)sulfonyl]tetrahydro-1'-(4-pyridinylmethyl)- (9CI) (CA  
INDEX NAME)

RN 441788-76-7 CAPLUS

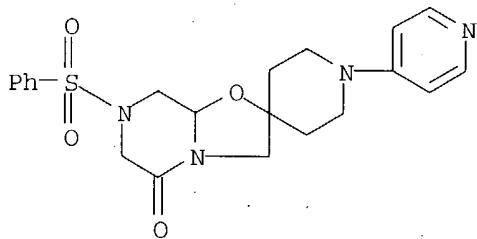
CN Spiro[imidazo[1,2-a]pyrazine-2(3H),4'-piperidin]-5(1H)-one,  
7-[(4-bromophenyl)sulfonyl]tetrahydro-1'-(4-pyridinyl)- (9CI) (CA INDEX  
NAME)



RN 441788-78-9 CAPLUS

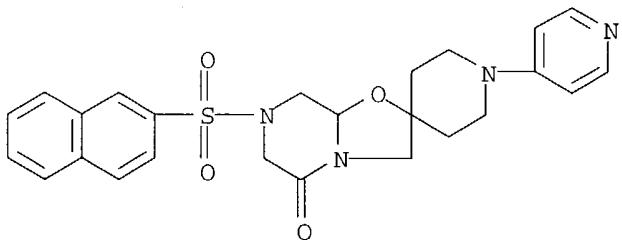
CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
7-[(4-chlorophenyl)sulfonyl]tetrahydro-1'--(4-pyridinyl)- (9CI) (CA INDEX  
NAME)

RN 441788-79-0 CAPLUS

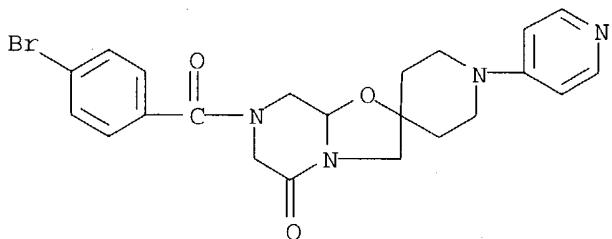
CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
tetrahydro-7-(phenylsulfonyl)-1'--(4-pyridinyl)- (9CI) (CA INDEX NAME)

RN 441788-80-3 CAPLUS

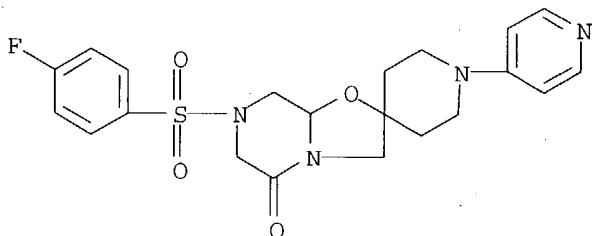
CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
tetrahydro-7-(2-naphthalenylsulfonyl)-1'--(4-pyridinyl)- (9CI) (CA INDEX  
NAME)



RN 441788-81-4 CAPLUS

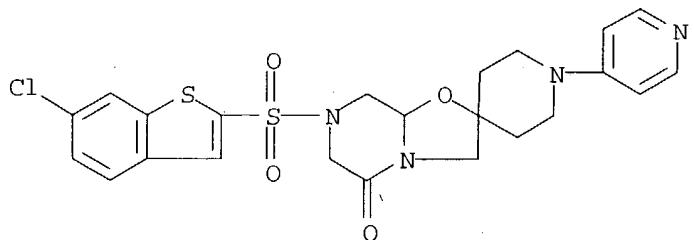
CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
7-(4-bromobenzoyl)tetrahydro-1'-(4-pyridinyl)- (9CI) (CA INDEX NAME)

RN 441788-82-5 CAPLUS

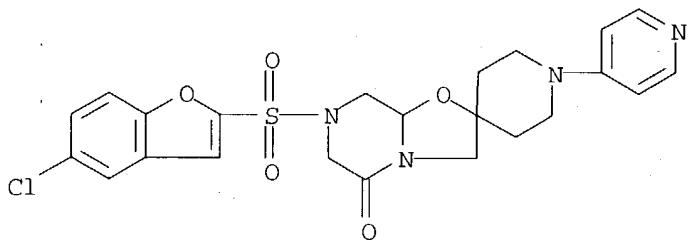
CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
7-[(4-fluorophenyl)sulfonyl]tetrahydro-1'-(4-pyridinyl)- (9CI) (CA INDEX  
NAME)

RN 441788-83-6 CAPLUS

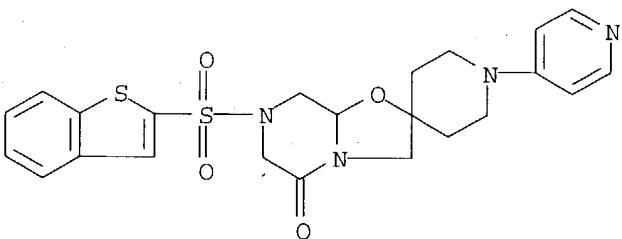
CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
7-[(6-chlorobenzo[b]thien-2-yl)sulfonyl]tetrahydro-1'-(4-pyridinyl)- (9CI)  
(CA INDEX NAME)



RN 441788-85-8 CAPLUS

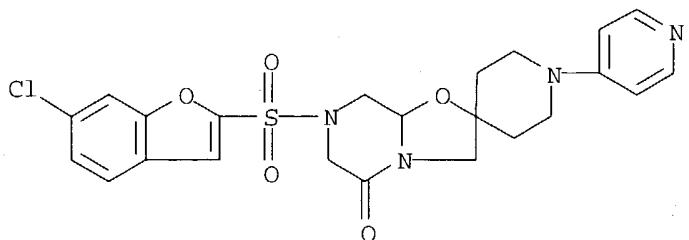
CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
7-[(5-chloro-2-benzofuranyl)sulfonyl]tetrahydro-1'-(4-pyridinyl)- (9CI)  
(CA INDEX NAME)

RN 441788-86-9 CAPLUS

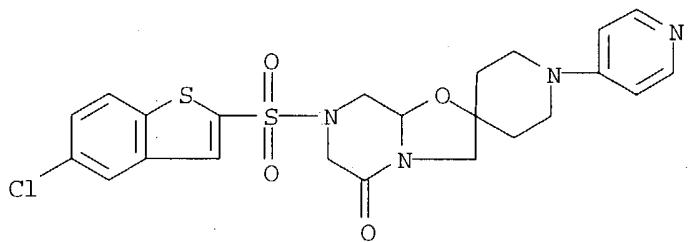
CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
7-(benzo[b]thien-2-ylsulfonyl)tetrahydro-1'-(4-pyridinyl)- (9CI) (CA  
INDEX NAME)

RN 441788-87-0 CAPLUS

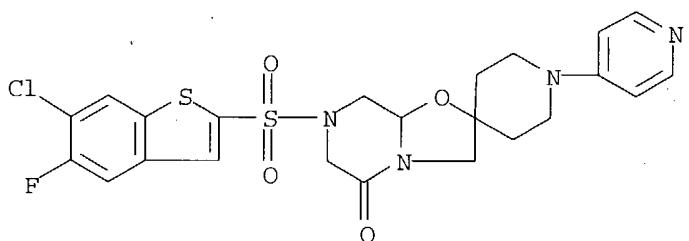
CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
7-[(6-chloro-2-benzofuranyl)sulfonyl]tetrahydro-1'-(4-pyridinyl)- (9CI)  
(CA INDEX NAME)



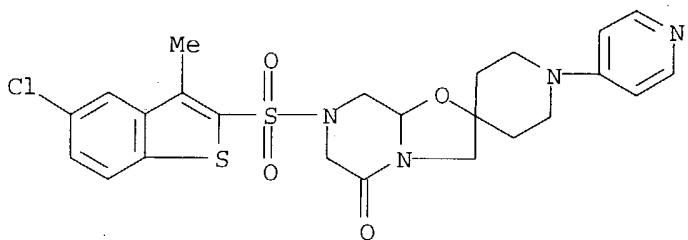
RN 441788-88-1 CAPLUS  
 CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
 7-[(5-chlorobenzo[b]thien-2-yl)sulfonyl]tetrahydro-1'-(4-pyridinyl)- (9CI)  
 (CA INDEX NAME)



RN 441788-89-2 CAPLUS  
 CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
 7-[(6-chloro-5-fluorobenzo[b]thien-2-yl)sulfonyl]tetrahydro-1'-(4-pyridinyl)- (9CI) (CA INDEX NAME)

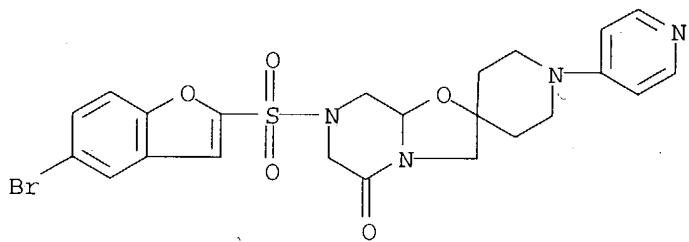


RN 441788-90-5 CAPLUS  
 CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
 7-[(5-chloro-3-methylbenzo[b]thien-2-yl)sulfonyl]tetrahydro-1'-(4-pyridinyl)- (9CI) (CA INDEX NAME)



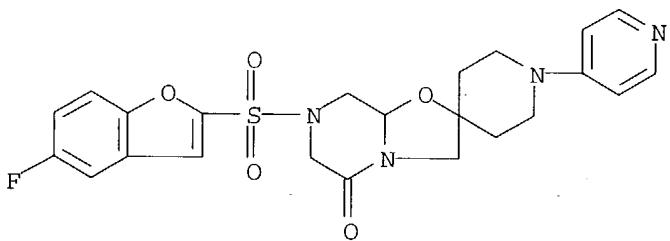
RN 441788-91-6 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
7-[(5-bromo-2-benzofuranyl)sulfonyl]tetrahydro-1'-(4-pyridinyl)- (9CI)  
(CA INDEX NAME)



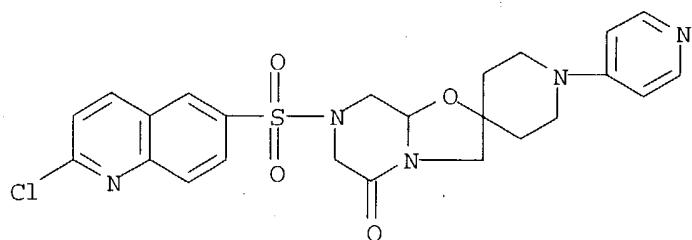
RN 441788-92-7 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
7-[(5-fluoro-2-benzofuranyl)sulfonyl]tetrahydro-1'-(4-pyridinyl)- (9CI)  
(CA INDEX NAME)

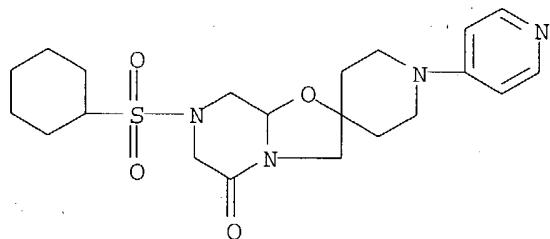


RN 441788-93-8 CAPLUS

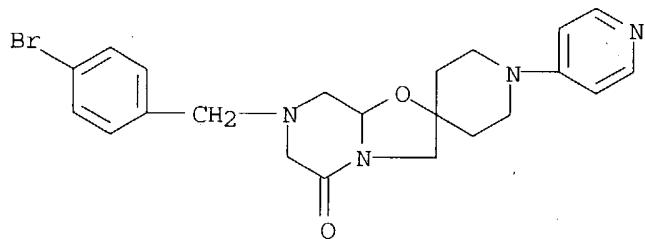
CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
7-[(2-chloro-6-quinoliny) sulfonyl]tetrahydro-1'-(4-pyridinyl)- (9CI) (CA  
INDEX NAME)



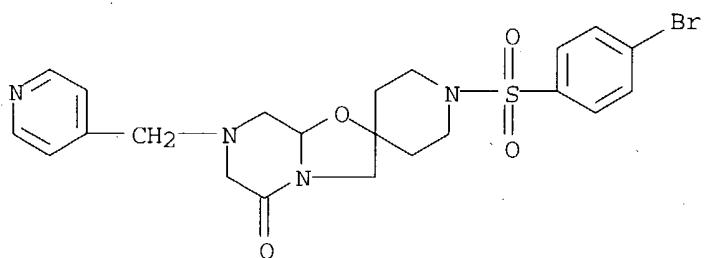
RN 441788-94-9 CAPLUS  
 CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
 7-(cyclohexylsulfonyl)tetrahydro-1'-(4-pyridinyl)- (9CI) (CA INDEX NAME)



RN 441788-97-2 CAPLUS  
 CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
 7-[(4-bromophenyl)methyl]tetrahydro-1'-(4-pyridinyl)- (9CI) (CA INDEX NAME)

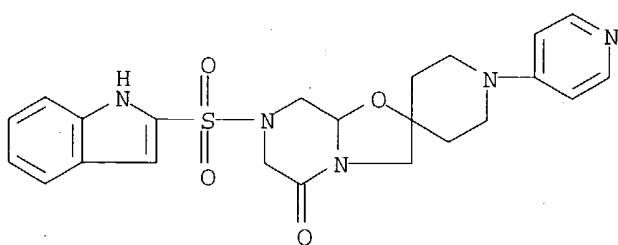


RN 441788-98-3 CAPLUS  
 CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
 1'-(4-bromophenylsulfonyl)tetrahydro-7-(4-pyridinylmethyl)- (9CI) (CA INDEX NAME)



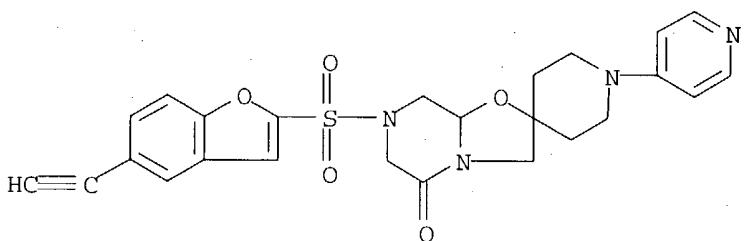
RN 441789-00-0 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
tetrahydro-7-(1H-indol-2-ylsulfonyl)-1'-(4-pyridinyl)- (9CI) (CA INDEX  
NAME)



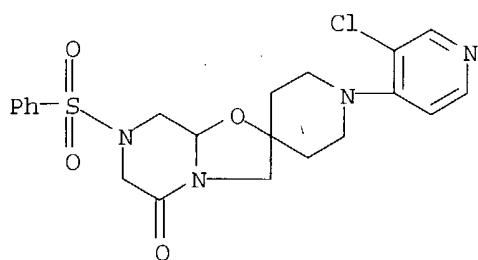
RN 441789-01-1 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
7-[(5-ethynyl-2-benzofuranyl)sulfonyl]tetrahydro-1'-(4-pyridinyl)- (9CI)  
(CA INDEX NAME)



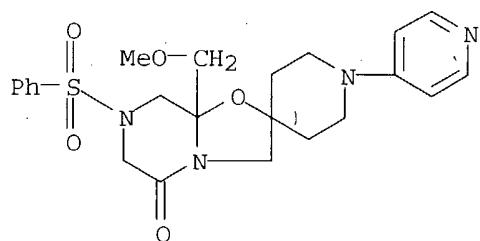
RN 441789-03-3 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
1'-(3-chloro-4-pyridinyl)tetrahydro-7-(phenylsulfonyl)- (9CI) (CA INDEX  
NAME)



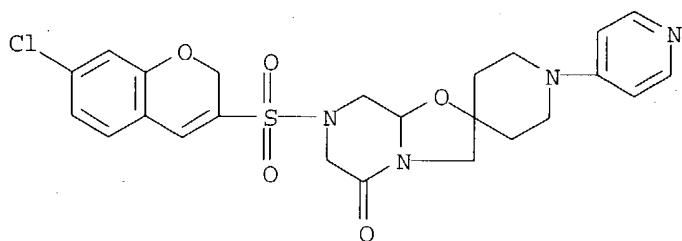
RN 441789-05-5 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
tetrahydro-8a-(methoxymethyl)-7-(phenylsulfonyl)-1'-(4-pyridinyl)- (9CI)  
(CA INDEX NAME)



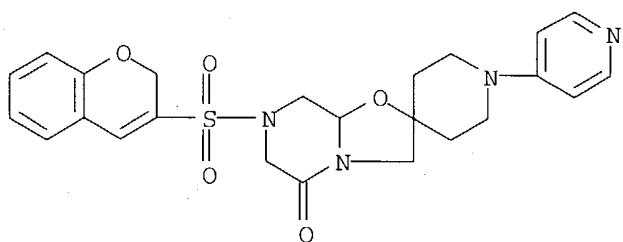
RN 441789-06-6 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
7-[(7-chloro-2H-1-benzopyran-3-yl)sulfonyl]tetrahydro-1'-(4-pyridinyl)-  
(9CI) (CA INDEX NAME)

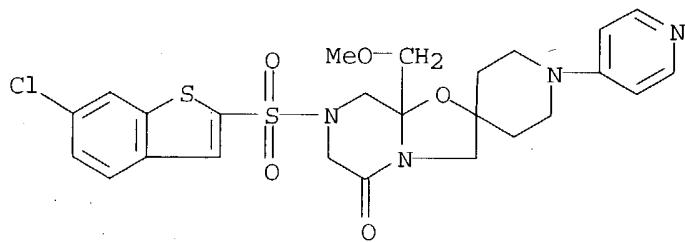


RN 441789-07-7 CAPLUS

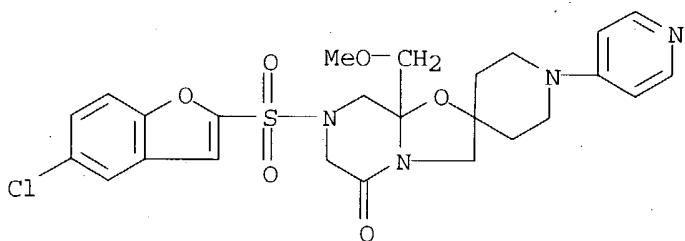
CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
7-(2H-1-benzopyran-3-ylsulfonyl)tetrahydro-1'-(4-pyridinyl)- (9CI) (CA  
INDEX NAME)



RN 441789-08-8 CAPLUS

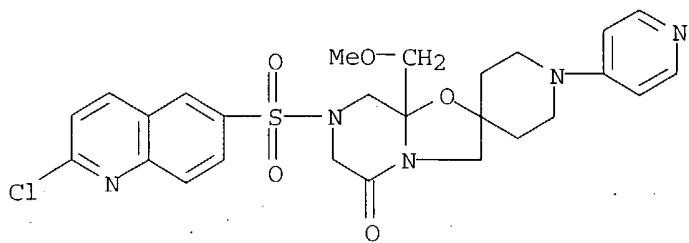
CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
7-[(6-chlorobenzo[b]thien-2-yl)sulfonyl]tetrahydro-8a-(methoxymethyl)-1'-  
(4-pyridinyl)- (9CI) (CA INDEX NAME)

RN 441789-10-2 CAPLUS

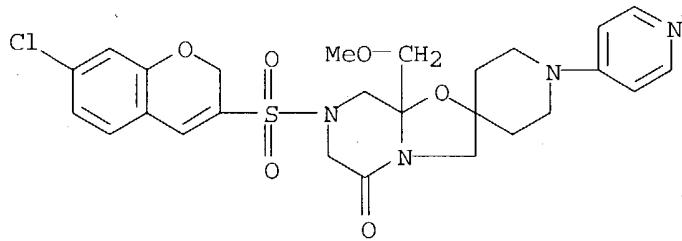
CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
7-[(5-chloro-2-benzofuranyl)sulfonyl]tetrahydro-8a-(methoxymethyl)-1'-  
(4-pyridinyl)- (9CI) (CA INDEX NAME)

RN 441789-11-3 CAPLUS

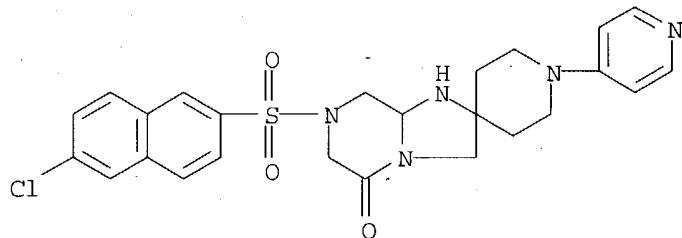
CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
7-[(2-chloro-6-quinolinyl)sulfonyl]tetrahydro-8a-(methoxymethyl)-1'-  
(4-pyridinyl)- (9CI) (CA INDEX NAME)



RN 441789-12-4 CAPLUS

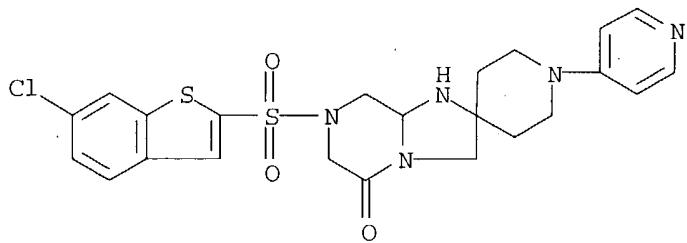
CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
7-[(7-chloro-2H-1-benzopyran-3-yl)sulfonyl]tetrahydro-8a-(methoxymethyl)-  
1'-(4-pyridinyl)- (9CI) (CA INDEX NAME)

RN 441789-13-5 CAPLUS

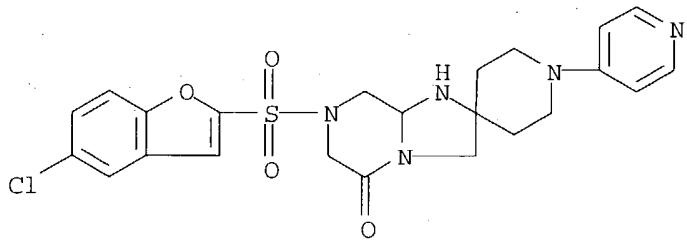
CN Spiro[imidazo[1,2-a]pyrazine-2(3H),4'-piperidin]-5(1H)-one,  
7-[(6-chloro-2-naphthalenyl)sulfonyl]tetrahydro-1'-(4-pyridinyl)- (9CI)  
(CA INDEX NAME)

RN 441789-14-6 CAPLUS

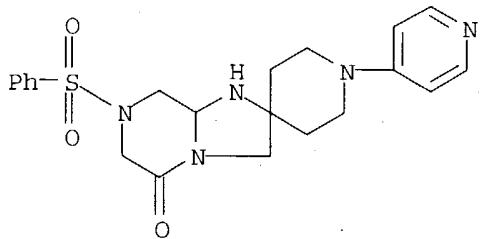
CN Spiro[imidazo[1,2-a]pyrazine-2(3H),4'-piperidin]-5(1H)-one,  
7-[(6-chlorobenzo[b]thien-2-yl)sulfonyl]tetrahydro-1'-(4-pyridinyl)- (9CI)  
(CA INDEX NAME)



RN 441789-16-8 CAPLUS

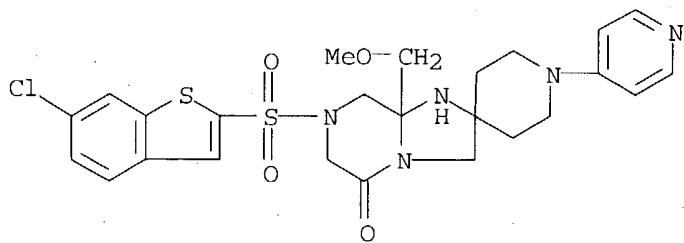
CN Spiro[imidazo[1,2-a]pyrazine-2(3H),4'-piperidin]-5(1H)-one,  
7-[(5-chloro-2-benzofuranyl)sulfonyl]tetrahydro-1'-(4-pyridinyl)- (9CI)  
(CA INDEX NAME)

RN 441789-17-9 CAPLUS

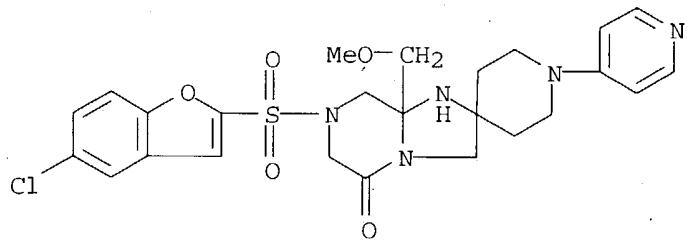
CN Spiro[imidazo[1,2-a]pyrazine-2(3H),4'-piperidin]-5(1H)-one,  
tetrahydro-7-(phenylsulfonyl)-1'-(4-pyridinyl)- (9CI) (CA INDEX NAME)

RN 441789-22-6 CAPLUS

CN Spiro[imidazo[1,2-a]pyrazine-2(3H),4'-piperidin]-5(1H)-one,  
7-[(6-chlorobenzo[b]thien-2-yl)sulfonyl]tetrahydro-8a-(methoxymethyl)-1'-(4-pyridinyl)- (9CI) (CA INDEX NAME)



RN 441789-24-8 CAPLUS

CN Spiro[imidazo[1,2-a]pyrazine-2(3H),4'-piperidin]-5(1H)-one,  
7-[(5-chloro-2-benzofuranyl)sulfonyl]tetrahydro-8a-(methoxymethyl)-1'-(4-pyridinyl)- (9CI) (CA INDEX NAME)

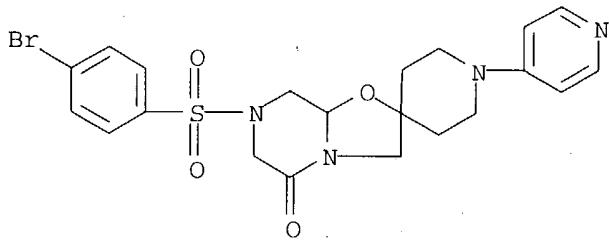
RN 441789-28-2 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
7-[(4-bromophenyl)sulfonyl]tetrahydro-1'-(4-pyridinyl)-, monomethanesulfonate (9CI) (CA INDEX NAME)

CM 1

CRN 441788-69-8

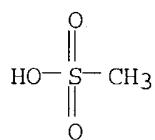
CMF C21 H23 Br N4 O4 S



CM 2

CRN 75-75-2

CMF C H4 O3 S



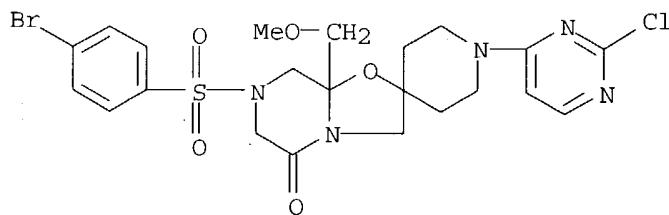
RN 441789-29-3 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
7-[(4-bromophenyl)sulfonyl]-1'-(2-chloro-4-pyrimidinyl)tetrahydro-8a-  
(methoxymethyl)-, monomethanesulfonate (9CI) (CA INDEX NAME)

CM 1

CRN 441788-71-2

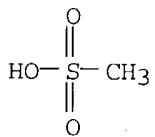
CMF C22 H25 Br Cl N5 O5 S



CM 2

CRN 75-75-2

CMF C H4 O3 S



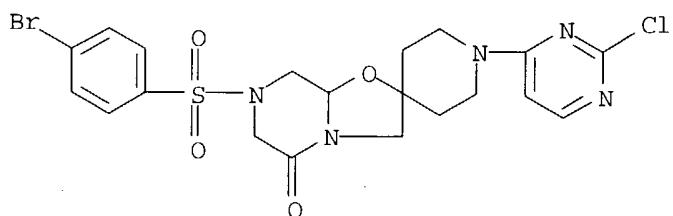
RN 441789-30-6 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
7-[(4-bromophenyl)sulfonyl]-1'-(2-chloro-4-pyrimidinyl)tetrahydro-,  
monomethanesulfonate (9CI) (CA INDEX NAME)

CM 1

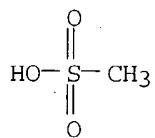
CRN 441788-72-3

CMF C20 H21 Br Cl N5 O4 S



CM 2

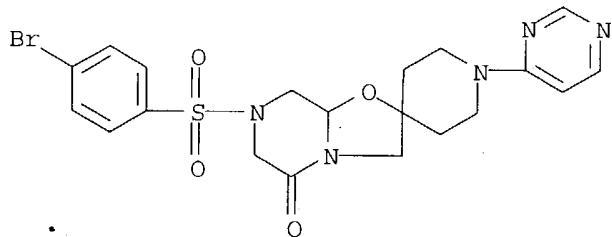
CRN 75-75-2  
 CMF C H4 O3 S



RN 441789-31-7 CAPLUS  
 CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
 7-[(4-bromophenyl)sulfonyl]tetrahydro-1'-(4-pyrimidinyl)-,  
 monomethanesulfonate (9CI) (CA INDEX NAME)

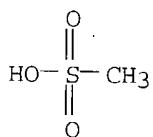
CM 1

CRN 441788-73-4  
 CMF C20 H22 Br N5 O4 S



CM 2

CRN 75-75-2  
 CMF C H4 O3 S



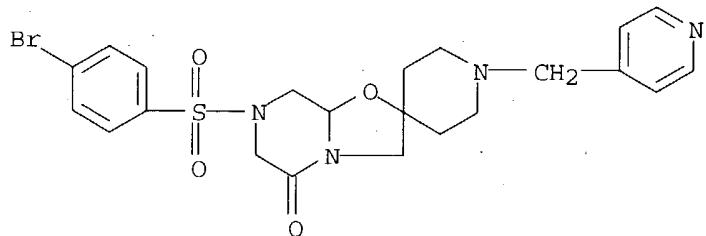
RN 441789-32-8 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
7-[(4-bromophenyl)sulfonyl]tetrahydro-1'-(4-pyridinylmethyl)-,  
monomethanesulfonate (9CI) (CA INDEX NAME)

CM 1

CRN 441788-75-6

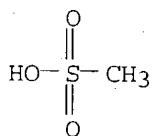
CMF C22 H25 Br N4 O4 S



CM 2

CRN 75-75-2

CMF C H4 O3 S



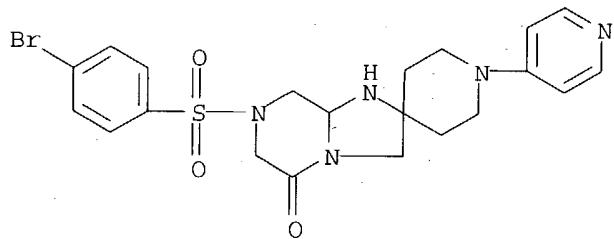
RN 441789-33-9 CAPLUS

CN Spiro[imidazo[1,2-a]pyrazine-2(3H),4'-piperidin]-5(1H)-one,  
7-[(4-bromophenyl)sulfonyl]tetrahydro-1'-(4-pyridinyl)-,  
monomethanesulfonate (9CI) (CA INDEX NAME)

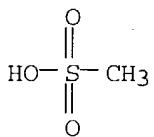
CM 1

CRN 441788-76-7

CMF C21 H24 Br N5 O3 S

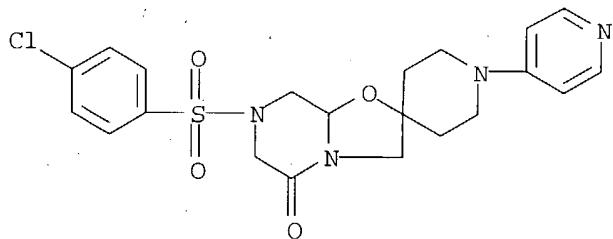


CM 2

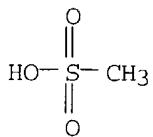
CRN 75-75-2  
CMF C H4 O3 S

RN 441789-35-1 CAPLUS  
 CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
 7-[(4-chlorophenyl)sulfonyl]tetrahydro-1'-(4-pyridinyl)-,  
 monomethanesulfonate (9CI) (CA INDEX NAME)

CM 1

CRN 441788-78-9  
CMF C21 H23 Cl N4 O4 S

CM 2

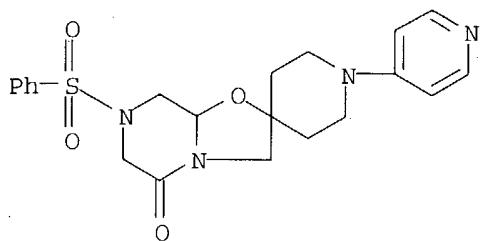
CRN 75-75-2  
CMF C H4 O3 S

RN 441789-36-2 CAPLUS  
 CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
 tetrahydro-7-(phenylsulfonyl)-1'-(4-pyridinyl)-, monomethanesulfonate  
 (9CI) (CA INDEX NAME)

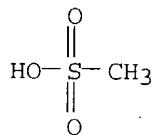
CM 1

CRN 441788-79-0

CMF C21 H24 N4 O4 S

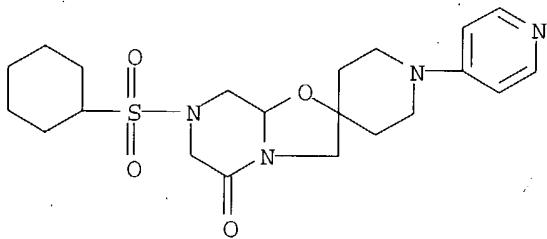


CM 2

CRN 75-75-2  
CMF C H4 O3 S

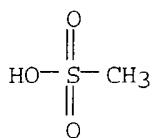
RN 441789-37-3 CAPLUS  
 CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
 7-(cyclohexylsulfonyl)tetrahydro-1'-(4-pyridinyl)-, monomethanesulfonate  
 (9CI) (CA INDEX NAME)

CM 1

CRN 441788-94-9  
CMF C21 H30 N4 O4 S

CM 2

CRN 75-75-2  
CMF C H4 O3 S



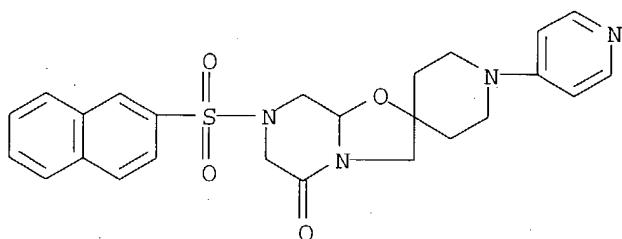
RN 441789-38-4 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
tetrahydro-7-(2-naphthalenylsulfonyl)-1'-(4-pyridinyl)-,  
monomethanesulfonate (9CI) (CA INDEX NAME)

CM 1

CRN 441788-80-3

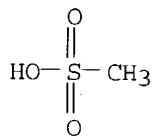
CMF C25 H26 N4 O4 S



CM 2

CRN 75-75-2

CMF C H4 O3 S



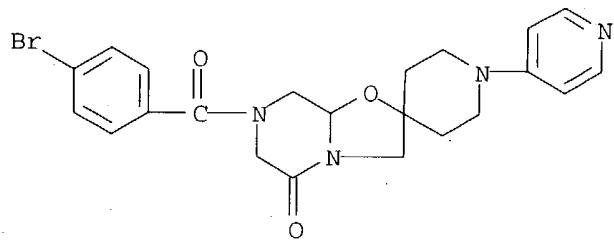
RN 441789-39-5 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
7-(4-bromobenzoyl)tetrahydro-1'-(4-pyridinyl)-, monomethanesulfonate (9CI)  
(CA INDEX NAME)

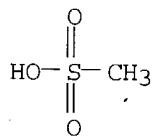
CM 1

CRN 441788-81-4

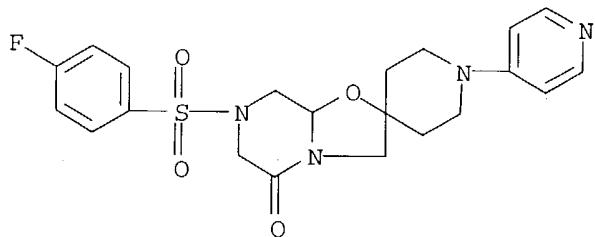
CMF C22 H23 Br N4 O3



CM 2

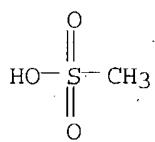
CRN 75-75-2  
CMF C H4 O3 SRN 441789-40-8 CAPLUS  
CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
7-[(4-fluorophenyl)sulfonyl]tetrahydro-1'-(4-pyridinyl)-,  
monomethanesulfonate (9CI) (CA INDEX NAME)

CM 1

CRN 441788-82-5  
CMF C21 H23 F N4 O4 S

CM 2

CRN 75-75-2  
CMF C H4 O3 S



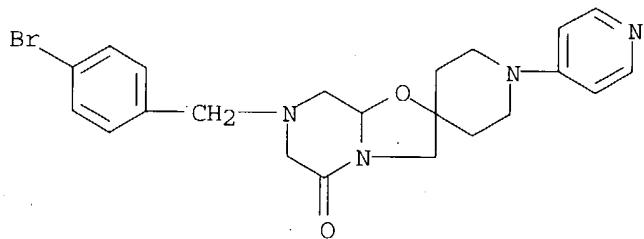
RN 441789-41-9 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
7-[(4-bromophenyl)methyl]tetrahydro-1'-(4-pyridinyl)-,  
monomethanesulfonate (9CI) (CA INDEX NAME)

CM 1

CRN 441788-97-2

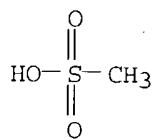
CMF C22 H25 Br N4 O2



CM 2

CRN 75-75-2

CMF C H4 O3 S



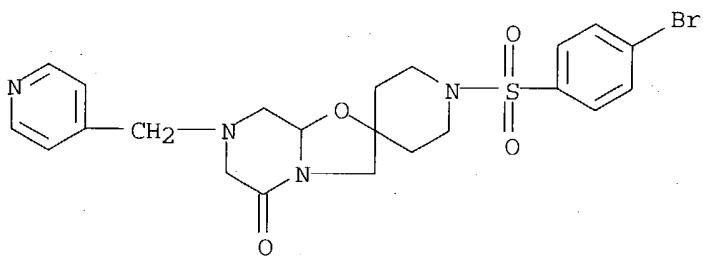
RN 441789-42-0 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
1'-(4-bromophenyl)sulfonyl]tetrahydro-7-(4-pyridinylmethyl)-,  
dimethanesulfonate (9CI) (CA INDEX NAME)

CM 1

CRN 441788-98-3

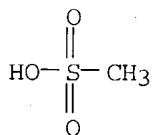
CMF C22 H25 Br N4 O4 S



CM 2

CRN 75-75-2

CMF C H4 O3 S



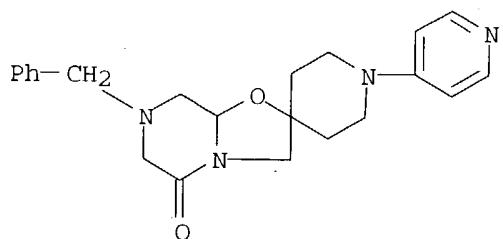
RN 441789-43-1 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one, tetrahydro-7-(phenylmethyl)-1'-(4-pyridinyl)-, dimethanesulfonate (9CI) (CA INDEX NAME)

CM 1

CRN 441789-02-2

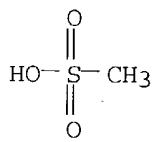
CMF C22 H26 N4 O2



CM 2

CRN 75-75-2

CMF C H4 O3 S



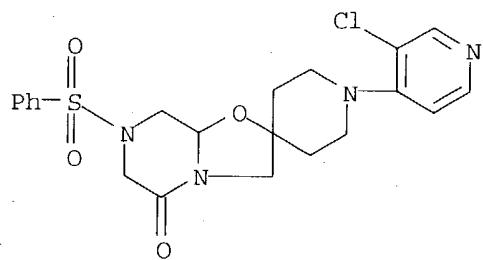
RN 441789-44-2 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
1'-(3-chloro-4-pyridinyl)tetrahydro-7-(phenylsulfonyl)-,  
monomethanesulfonate (9CI) (CA INDEX NAME)

CM 1

CRN 441789-03-3

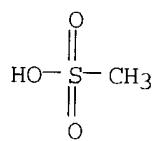
CMF C21 H23 Cl N4 O4 S



CM 2

CRN 75-75-2

CMF C H4 O3 S



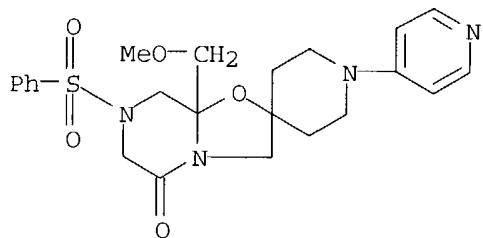
RN 441789-46-4 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
tetrahydro-8a-(methoxymethyl)-7-(phenylsulfonyl)-1'-(4-pyridinyl)-,  
monomethanesulfonate (9CI) (CA INDEX NAME)

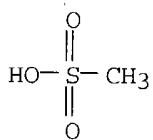
CM 1

CRN 441789-05-5

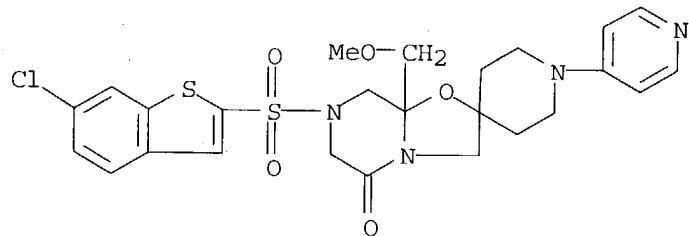
CMF C23 H28 N4 O5 S



CM 2

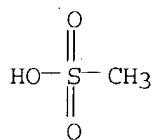
CRN 75-75-2  
CMF C H4 O3 SRN 441789-47-5 CAPLUS  
CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
7-[(6-chlorobenzo[b]thien-2-yl)sulfonyl]tetrahydro-8a-(methoxymethyl)-1'-  
(4-pyridinyl)-, monomethanesulfonate (9CI) (CA INDEX NAME)

CM 1

CRN 441789-08-8  
CMF C25 H27 Cl N4 O5 S2

CM 2

CRN 75-75-2  
CMF C H4 O3 S



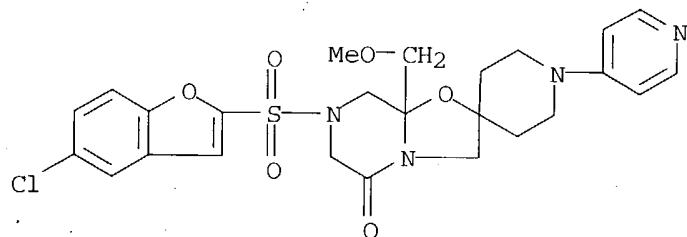
RN 441789-49-7 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
7-[(5-chloro-2-benzofuranyl)sulfonyl]tetrahydro-8a-(methoxymethyl)-1'-(4-pyridinyl)-, monomethanesulfonate (9CI) (CA INDEX NAME)

CM 1

CRN 441789-10-2

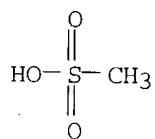
CMF C25 H27 Cl N4 O6 S



CM 2

CRN 75-75-2

CMF C H4 O3 S



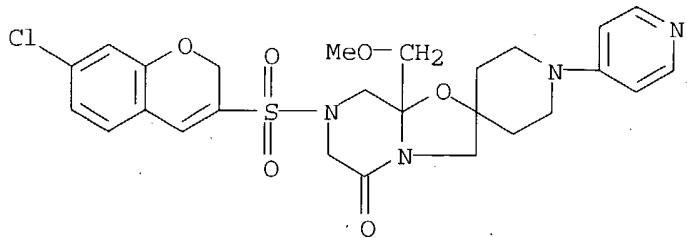
RN 441789-50-0 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
7-[(7-chloro-2H-1-benzopyran-3-yl)sulfonyl]tetrahydro-8a-(methoxymethyl)-1'-(4-pyridinyl)-, monomethanesulfonate (9CI) (CA INDEX NAME)

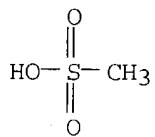
CM 1

CRN 441789-12-4

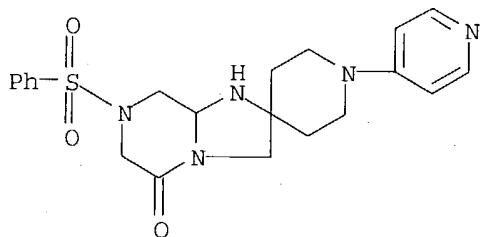
CMF C26 H29 Cl N4 O6 S



CM 2

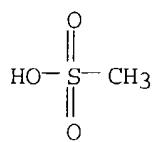
CRN 75-75-2  
CMF C H4 O3 SRN 441789-51-1 CAPLUS  
CN Spiro[imidazo[1,2-a]pyrazine-2(3H),4'-piperidin]-5(1H)-one,  
tetrahydro-7-(phenylsulfonyl)-1'-(4-pyridinyl)-, dimethanesulfonate (9CI)  
(CA INDEX NAME)

CM 1

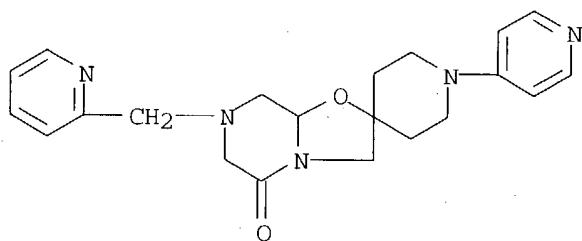
CRN 441789-17-9  
CMF C21 H25 N5 O3 S

CM 2

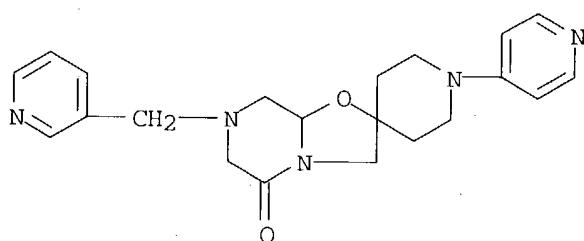
CRN 75-75-2  
CMF C H4 O3 S



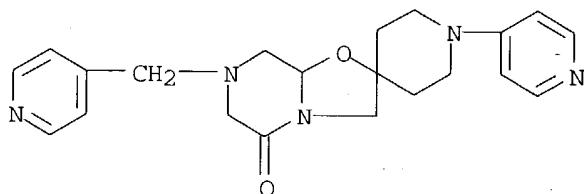
RN 441789-52-2 CAPLUS  
 CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
 tetrahydro-1'-(4-pyridinyl)-7-(2-pyridinylmethyl)- (9CI) (CA INDEX NAME)



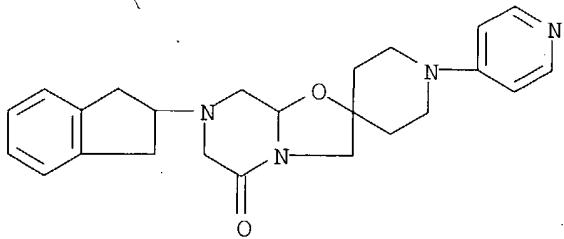
RN 441789-53-3 CAPLUS  
 CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
 tetrahydro-1'-(4-pyridinyl)-7-(3-pyridinylmethyl)- (9CI) (CA INDEX NAME)



RN 441789-54-4 CAPLUS  
 CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
 tetrahydro-1'-(4-pyridinyl)-7-(4-pyridinylmethyl)- (9CI) (CA INDEX NAME)

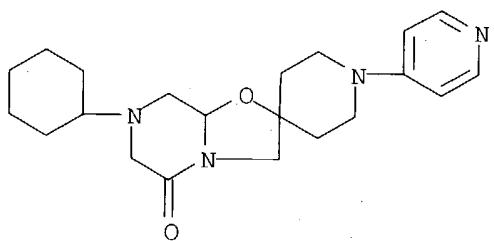


RN 441789-56-6 CAPLUS  
 CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
 7-(2,3-dihydro-1H-inden-2-yl)tetrahydro-1'-(4-pyridinyl)- (9CI) (CA INDEX NAME)



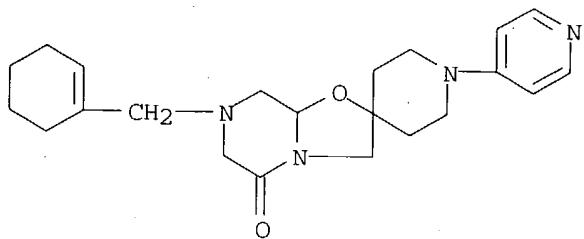
RN 441789-57-7 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
7-cyclohexyltetrahydro-1'-(4-pyridinyl)- (9CI) (CA INDEX NAME)



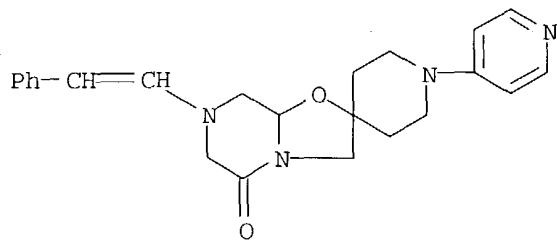
RN 441789-58-8 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
7-(1-cyclohexen-1-ylmethyl)tetrahydro-1'-(4-pyridinyl)- (9CI) (CA INDEX  
NAME)

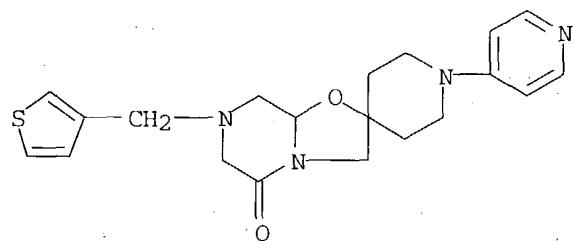


RN 441789-59-9 CAPLUS

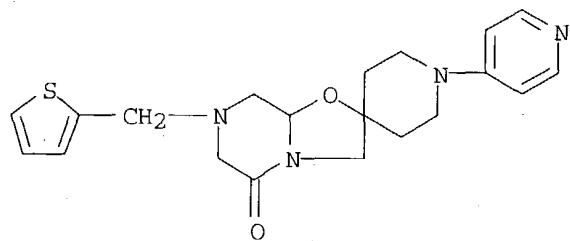
CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
tetrahydro-7-(2-phenylethenyl)-1'-(4-pyridinyl)- (9CI) (CA INDEX NAME)



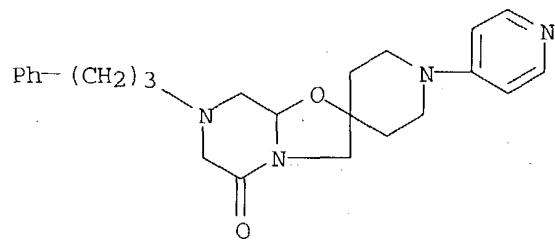
RN 441789-60-2 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
tetrahydro-1'-(4-pyridinyl)-7-(3-thienylmethyl)- (9CI) (CA INDEX NAME)

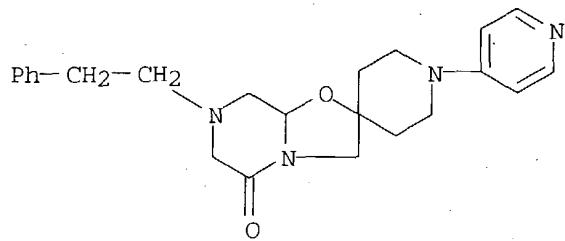
RN 441789-61-3 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
tetrahydro-1'-(4-pyridinyl)-7-(2-thienylmethyl)- (9CI) (CA INDEX NAME)

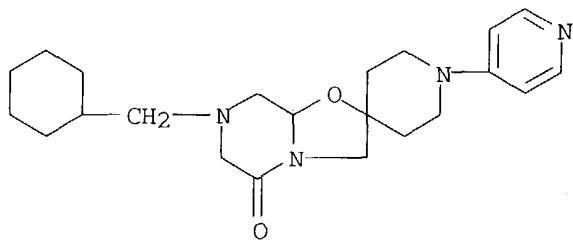
RN 441789-62-4 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
tetrahydro-7-(3-phenylpropyl)-1'-(4-pyridinyl)- (9CI) (CA INDEX NAME)

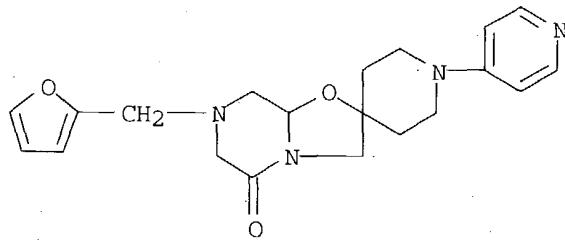
RN 441789-63-5 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
tetrahydro-7-(2-phenylethyl)-1'-(4-pyridinyl)- (9CI) (CA INDEX NAME)

RN 441789-64-6 CAPLUS

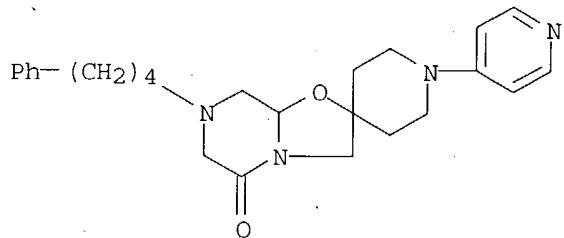
CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
7-(cyclohexylmethyl)tetrahydro-1'-(4-pyridinyl)- (9CI) (CA INDEX NAME)

RN 441789-66-8 CAPLUS

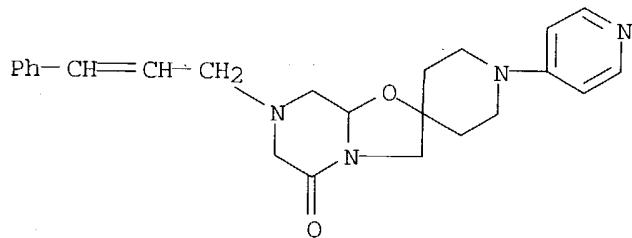
CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
7-(2-furanyl methyl)tetrahydro-1'-(4-pyridinyl)- (9CI) (CA INDEX NAME)

RN 441789-67-9 CAPLUS

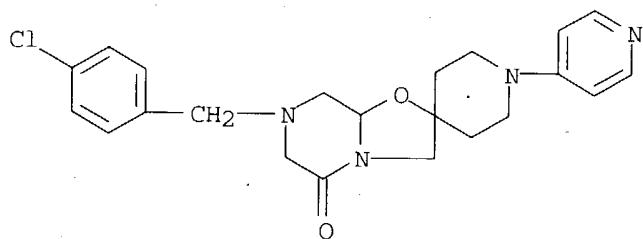
CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
tetrahydro-7-(4-phenylbutyl)-1'-(4-pyridinyl)- (9CI) (CA INDEX NAME)



RN 441789-68-0 CAPLUS

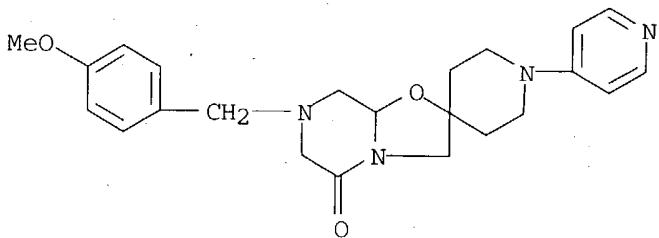
CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
tetrahydro-7-(3-phenyl-2-propenyl)-1'-(4-pyridinyl)- (9CI) (CA INDEX  
NAME)

RN 441789-69-1 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
7-[(4-chlorophenyl)methyl]tetrahydro-1'-(4-pyridinyl)- (9CI) (CA INDEX  
NAME)

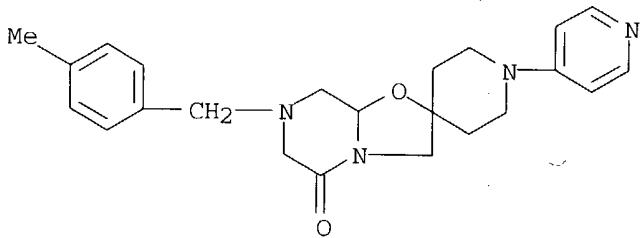
RN 441789-70-4 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
tetrahydro-7-[(4-methoxyphenyl)methyl]-1'-(4-pyridinyl)- (9CI) (CA INDEX  
NAME)



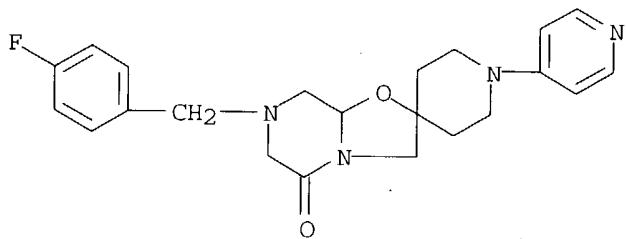
RN 441789-71-5 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
tetrahydro-7-[(4-methylphenyl)methyl]-1'-(4-pyridinyl)- (9CI) (CA INDEX  
NAME)



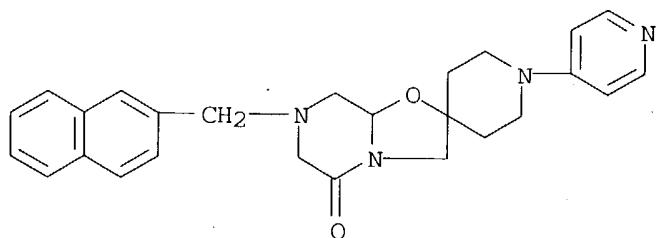
RN 441789-72-6 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
7-[(4-fluorophenyl)methyl]tetrahydro-1'-(4-pyridinyl)- (9CI) (CA INDEX  
NAME)

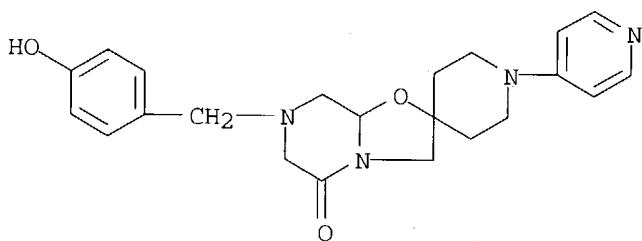


RN 441789-73-7 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
tetrahydro-7-(2-naphthalenylmethyl)-1'-(4-pyridinyl)- (9CI) (CA INDEX  
NAME)

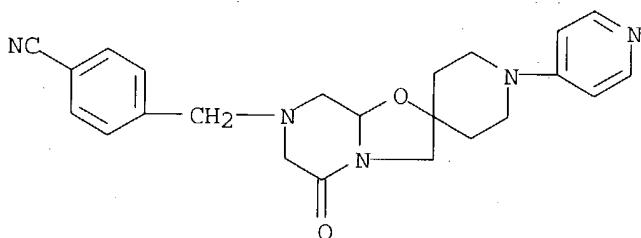


RN 441789-74-8 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
tetrahydro-7-[(4-hydroxyphenyl)methyl]-1'-(4-pyridinyl)- (9CI) (CA INDEX  
NAME)

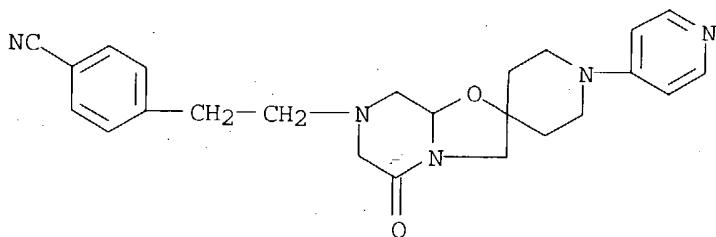
RN 441789-75-9 CAPLUS

CN Benzonitrile, 4-[[tetrahydro-5-oxo-1'-(4-pyridinyl)spiro[7H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-7-yl]methyl]- (9CI) (CA INDEX NAME)

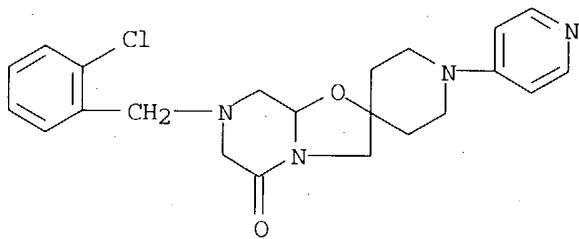


RN 441789-78-2 CAPLUS

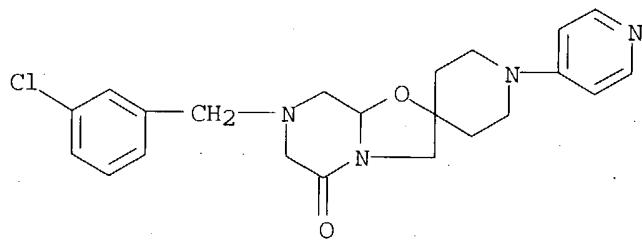
CN Benzonitrile, 4-[2-[4-(4-cyanophenylbutyl)piperidin-1-yl]spiro[7H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-7-yl]ethyl- (9CI) (CA INDEX NAME)



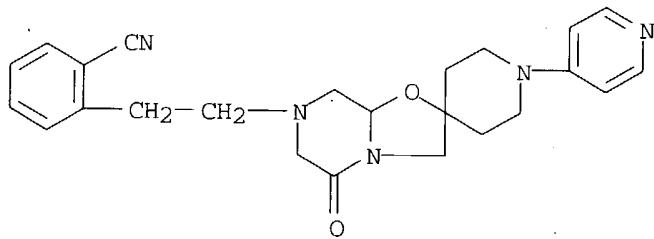
RN 441789-79-3 CAPLUS  
 CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
 7-[(2-chlorophenyl)methyl]tetrahydro-1'-(4-pyridinyl)- (9CI) (CA INDEX  
 NAME)



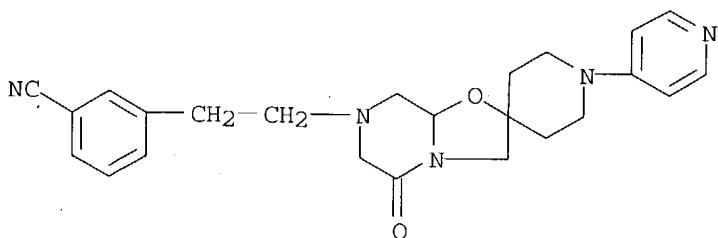
RN 441789-80-6 CAPLUS  
 CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
 7-[(3-chlorophenyl)methyl]tetrahydro-1'-(4-pyridinyl)- (9CI) (CA INDEX  
 NAME)



RN 441789-81-7 CAPLUS  
 CN Benzonitrile, 2-[2-[(4-pyridinyl)spiro[7H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-7-yl]ethyl]- (9CI) (CA INDEX NAME)

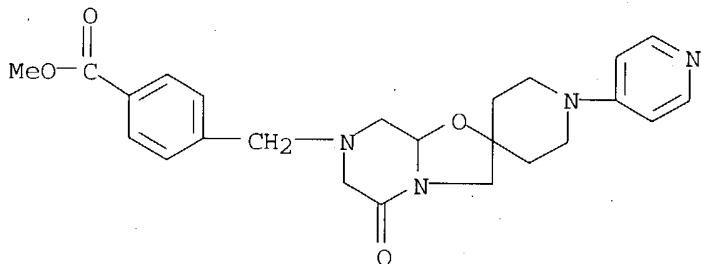


RN 441789-82-8 CAPLUS  
 CN Benzonitrile, 3-[2-[(4-pyridinyl)spiro[7H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-7-yl]ethyl]- (9CI) (CA INDEX NAME)



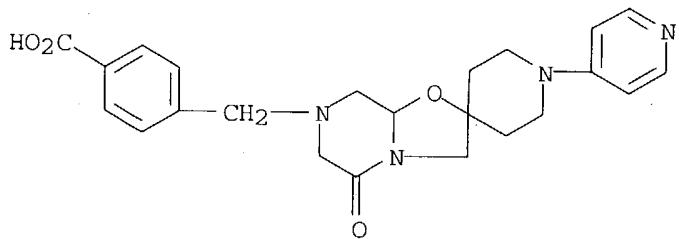
RN 441789-83-9 CAPLUS

CN Benzoic acid, 4-[(tetrahydro-5-oxo-1'-(4-pyridinyl)spiro[7H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-7-yl)methyl]-, methyl ester (9CI) (CA INDEX NAME)



RN 441789-84-0 CAPLUS

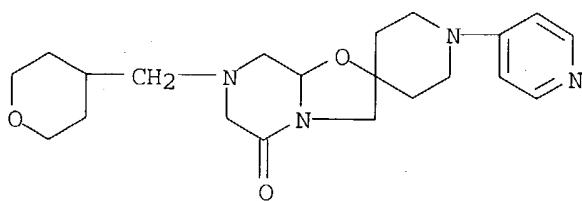
CN Benzoic acid, 4-[(tetrahydro-5-oxo-1'-(4-pyridinyl)spiro[7H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-7-yl)methyl]-, sodium salt (9CI) (CA INDEX NAME)



● Na

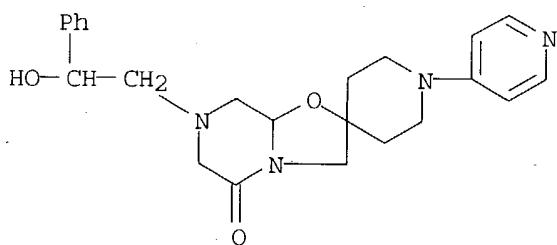
RN 441789-85-1 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one, tetrahydro-1'-(4-pyridinyl)-7-[(tetrahydro-2H-pyran-4-yl)methyl]- (9CI) (CA INDEX NAME)



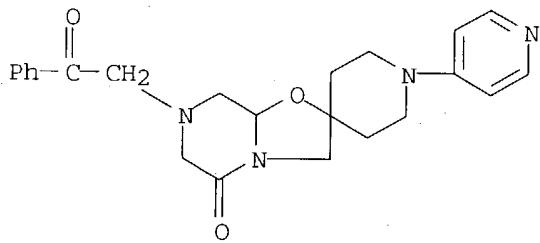
RN 441789-86-2 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one, tetrahydro-7-(2-hydroxy-2-phenylethyl)-1'-(4-pyridinyl)- (9CI) (CA INDEX NAME)



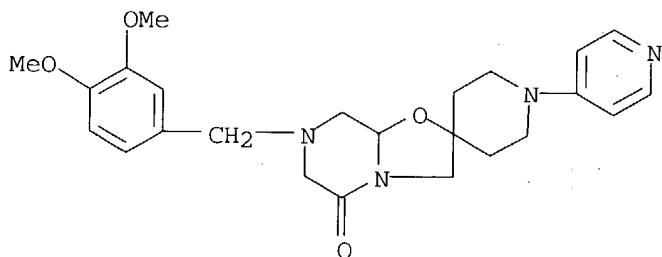
RN 441789-87-3 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one, tetrahydro-7-(2-oxo-2-phenylethyl)-1'-(4-pyridinyl)- (9CI) (CA INDEX NAME)

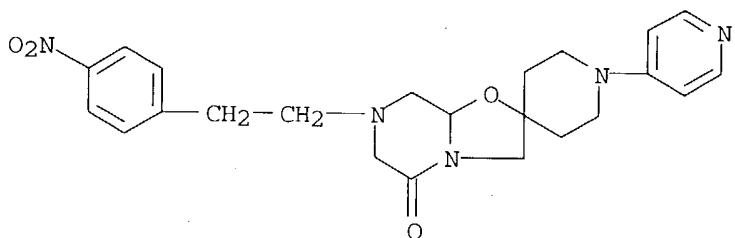


RN 441789-88-4 CAPLUS

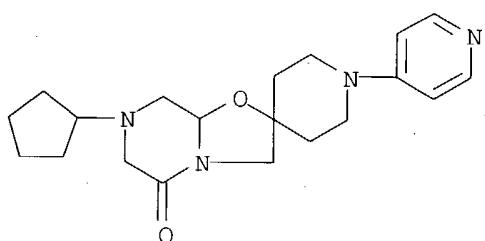
CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one, 7-[(3,4-dimethoxyphenyl)methyl]tetrahydro-1'-(4-pyridinyl)- (9CI) (CA INDEX NAME)



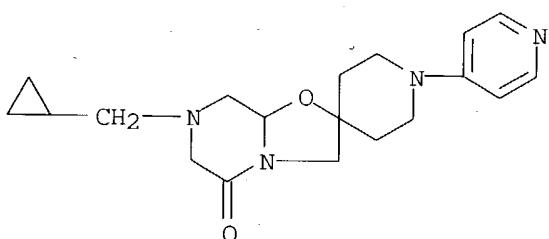
RN 441789-89-5 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
tetrahydro-7-[2-(4-nitrophenyl)ethyl]-1'-(4-pyridinyl)- (9CI) (CA INDEX  
NAME)

RN 441789-90-8 CAPLUS

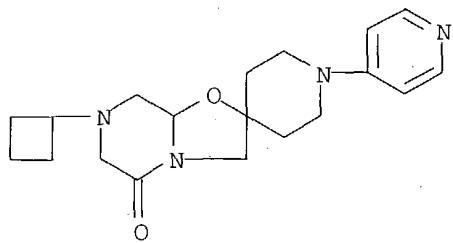
CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
7-cyclopentyltetrahydro-1'-(4-pyridinyl)- (9CI) (CA INDEX NAME)

RN 441789-91-9 CAPLUS

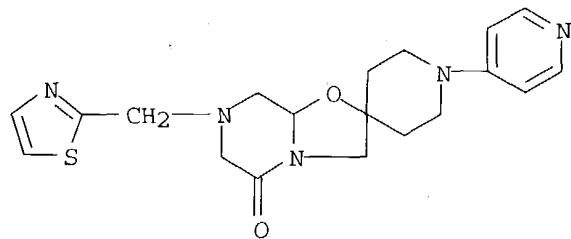
CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
7-(cyclopropylmethyl)tetrahydro-1'-(4-pyridinyl)- (9CI) (CA INDEX NAME)

RN 441789-92-0 CAPLUS

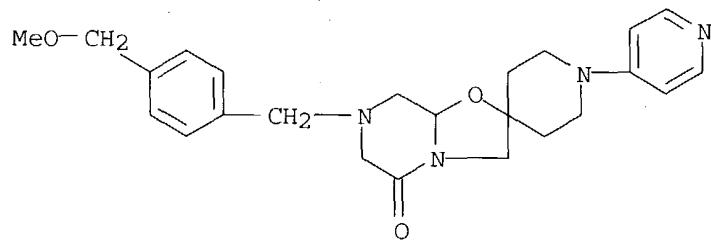
CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
7-cyclobutyltetrahydro-1'-(4-pyridinyl)- (9CI) (CA INDEX NAME)



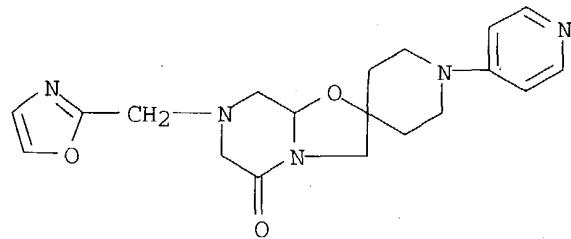
RN 441789-93-1 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
tetrahydro-1'-(4-pyridinyl)-7-(2-thiazolylmethyl)- (9CI) (CA INDEX NAME)

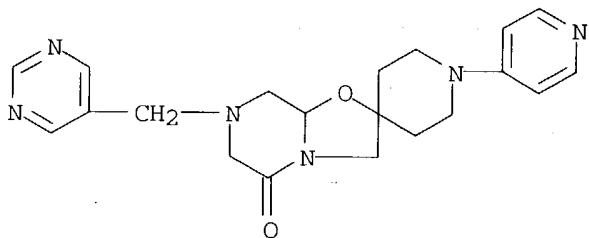
RN 441789-94-2 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
tetrahydro-7-[(4-(methoxymethyl)phenyl)methyl]-1'-(4-pyridinyl)- (9CI)  
(CA INDEX NAME)

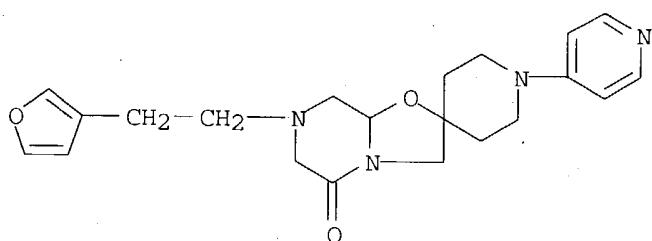
RN 441789-95-3 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
tetrahydro-7-(2-oxazolylmethyl)-1'-(4-pyridinyl)- (9CI) (CA INDEX NAME)

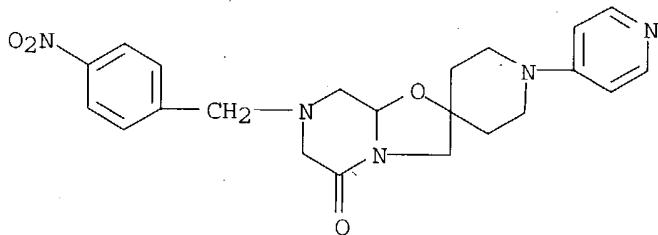
RN 441789-96-4 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
tetrahydro-1'-(4-pyridinyl)-7-(5-pyrimidinylmethyl)- (9CI) (CA INDEX  
NAME)

RN 441789-97-5 CAPLUS

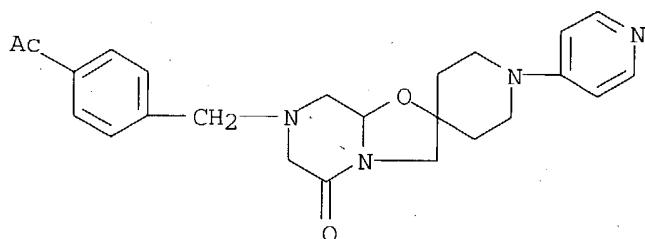
CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
7-[2-(3-furanyl)ethyl]tetrahydro-1'-(4-pyridinyl)- (9CI) (CA INDEX NAME)

RN 441789-98-6 CAPLUS

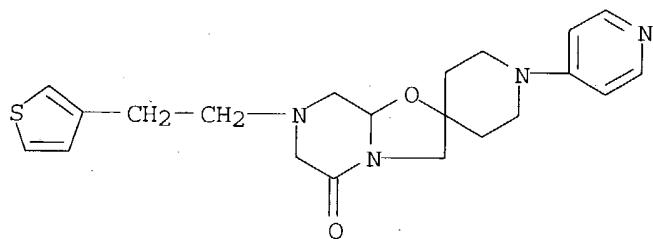
CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
tetrahydro-7-[(4-nitrophenyl)methyl]-1'-(4-pyridinyl)- (9CI) (CA INDEX  
NAME)

RN 441789-99-7 CAPLUS

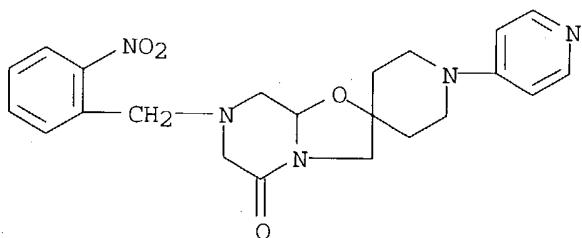
CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
7-[(4-acetylphenyl)methyl]tetrahydro-1'-(4-pyridinyl)- (9CI) (CA INDEX  
NAME)



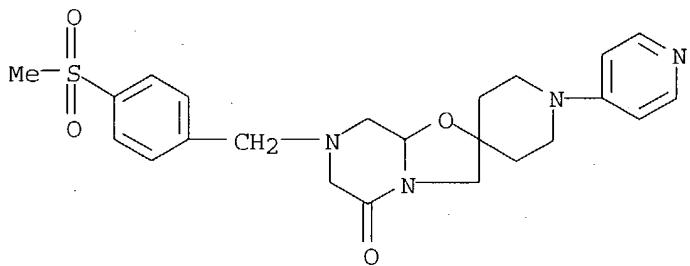
RN 441790-00-7 CAPLUS  
 CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
 tetrahydro-1'-(4-pyridinyl)-7-[2-(3-thienyl)ethyl]- (9CI) (CA INDEX NAME)



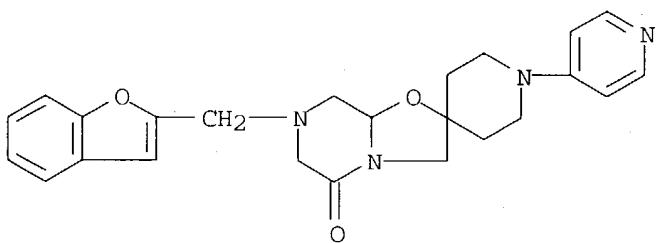
RN 441790-01-8 CAPLUS  
 CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
 tetrahydro-7-[(2-nitrophenyl)methyl]-1'-(4-pyridinyl)- (9CI) (CA INDEX NAME)



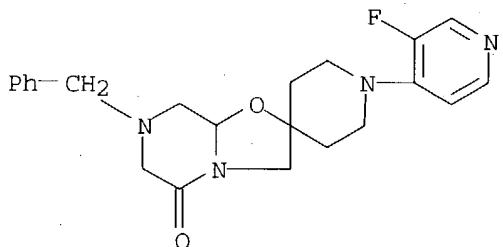
RN 441790-02-9 CAPLUS  
 CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
 tetrahydro-7-[[4-(methylsulfonyl)phenyl]methyl]-1'-(4-pyridinyl)- (9CI) (CA INDEX NAME)



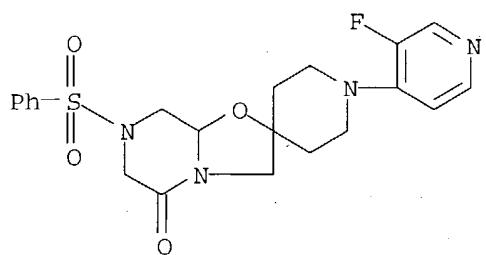
RN 441790-03-0 CAPLUS  
 CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
 7-(2-benzofuranylmethyl)tetrahydro-1'-(4-pyridinyl)- (9CI) (CA INDEX  
 NAME)



RN 441790-04-1 CAPLUS  
 CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
 1'-(3-fluoro-4-pyridinyl)tetrahydro-7-(phenylmethyl)- (9CI) (CA INDEX  
 NAME)

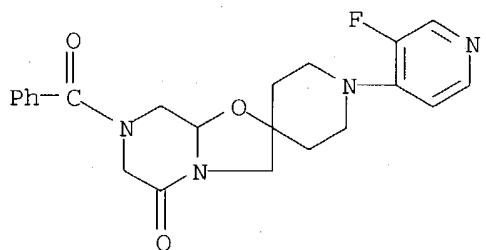


RN 441790-05-2 CAPLUS  
 CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
 1'-(3-fluoro-4-pyridinyl)tetrahydro-7-(phenylsulfonyl)- (9CI) (CA INDEX  
 NAME)



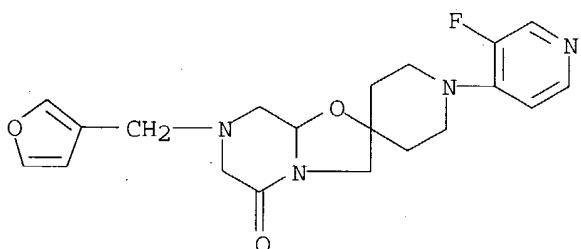
RN 441790-06-3 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
7-benzoyl-1'-(3-fluoro-4-pyridinyl)tetrahydro- (9CI) (CA INDEX NAME)



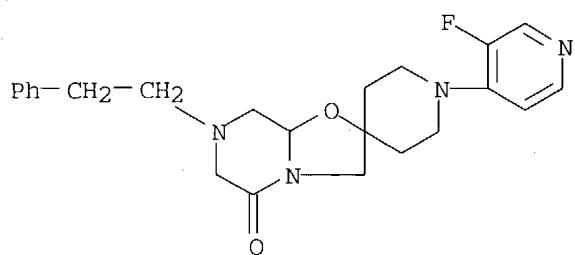
RN 441790-07-4 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
1'-(3-fluoro-4-pyridinyl)-7-(3-furanyl methyl)tetrahydro- (9CI) (CA INDEX  
NAME)

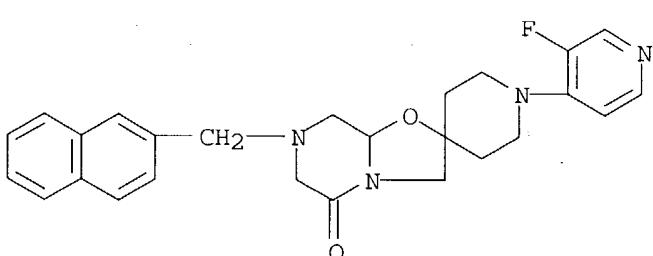
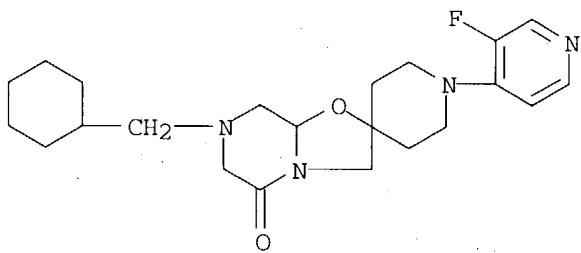


RN 441790-08-5 CAPLUS

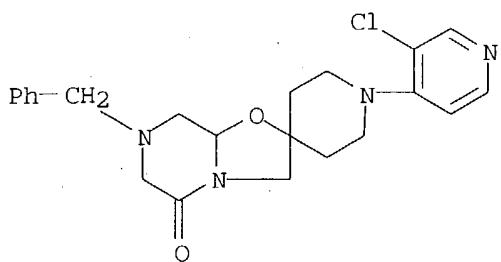
CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
1'-(3-fluoro-4-pyridinyl)tetrahydro-7-(2-phenylethyl)- (9CI) (CA INDEX  
NAME)



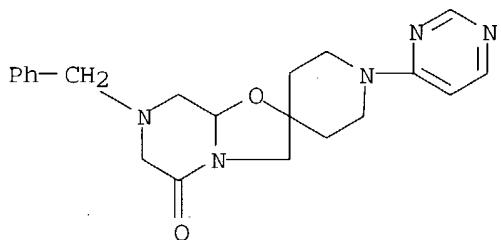
RN 441790-09-6 CAPLUS  
 CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
 7-(cyclohexylmethyl)-1'-(3-fluoro-4-pyridinyl)tetrahydro- (9CI) (CA INDEX NAME)



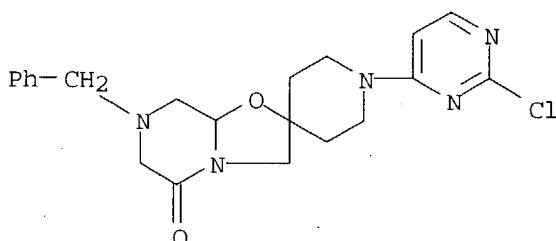
RN 441790-11-0 CAPLUS  
 CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
 1'-(3-chloro-4-pyridinyl)tetrahydro-7-(phenylmethyl)- (9CI) (CA INDEX NAME)



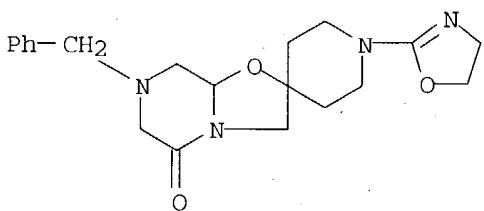
RN 441790-12-1 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
tetrahydro-7-(phenylmethyl)-1'-(4-pyrimidinyl)- (9CI) (CA INDEX NAME)

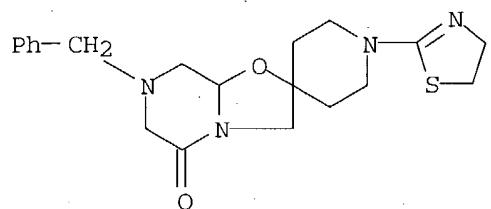
RN 441790-13-2 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
1'-(2-chloro-4-pyrimidinyl)tetrahydro-7-(phenylmethyl)- (9CI) (CA INDEX NAME)

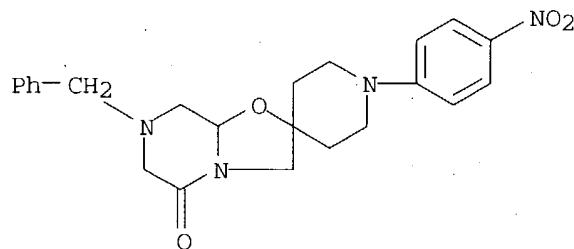
RN 441790-14-3 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
1'-(4,5-dihydro-2-oxazolyl)tetrahydro-7-(phenylmethyl)- (9CI) (CA INDEX NAME)

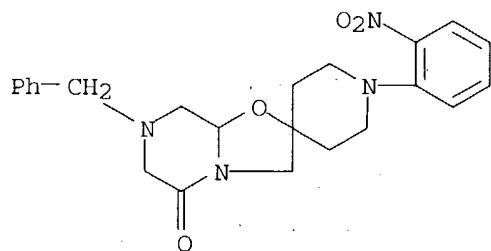
RN 441790-15-4 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
1'-(4,5-dihydro-2-thiazolyl)tetrahydro-7-(phenylmethyl)- (9CI) (CA INDEX  
NAME)

RN 441790-16-5 CAPLUS

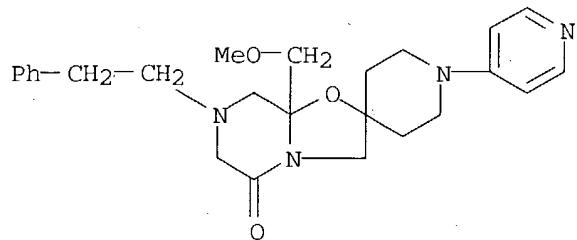
CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
tetrahydro-1'-(4-nitrophenyl)-7-(phenylmethyl)- (9CI) (CA INDEX NAME)

RN 441790-17-6 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
tetrahydro-1'-(2-nitrophenyl)-7-(phenylmethyl)- (9CI) (CA INDEX NAME)

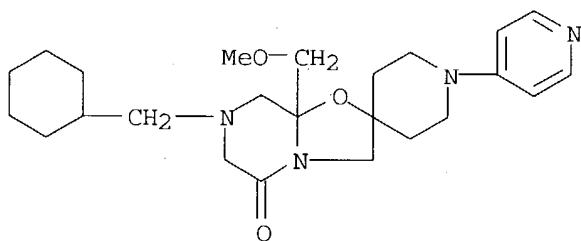
RN 441790-19-8 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
tetrahydro-8a-(methoxymethyl)-7-(2-phenylethyl)-1'-(4-pyridinyl)- (9CI)  
(CA INDEX NAME)



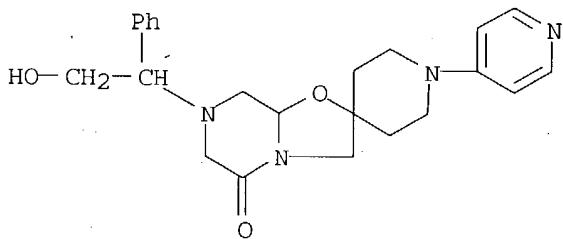
RN 441790-20-1 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
7-(cyclohexylmethyl)tetrahydro-8a-(methoxymethyl)-1'-(4-pyridinyl)- (9CI)  
(CA INDEX NAME)



RN 441790-21-2 CAPLUS

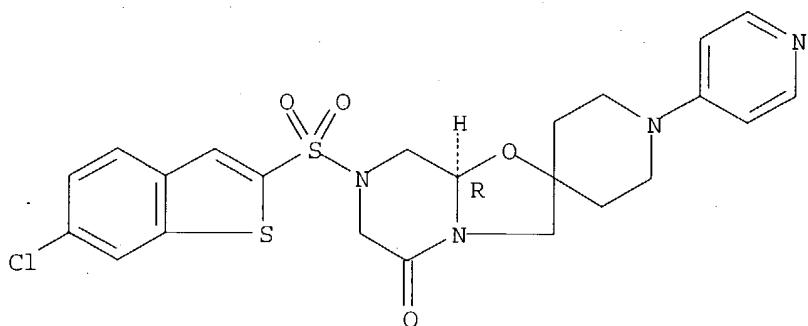
CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
tetrahydro-7-(2-hydroxy-1-phenylethyl)-1'-(4-pyridinyl)- (9CI) (CA INDEX  
NAME)



RN 441790-86-9 CAPLUS

CN · Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
7-[(6-chlorobenzo[b]thien-2-yl)sulfonyl]tetrahydro-1'-(4-pyridinyl)-,  
(8aR)- (9CI) (CA INDEX NAME)

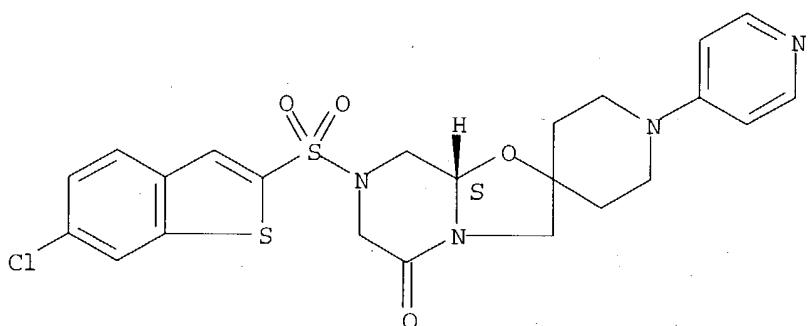
## Absolute stereochemistry.



RN 441790-87-0 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
7-[(6-chlorobenzo[b]thien-2-yl)sulfonyl]tetrahydro-1'-(4-pyridinyl)-,  
(8aS)- (9CI) (CA INDEX NAME)

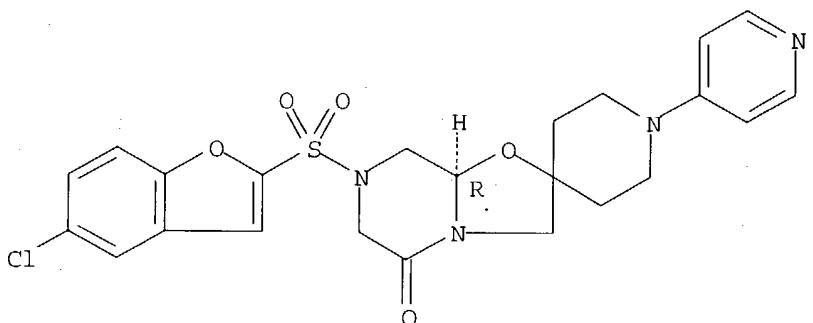
Absolute stereochemistry.



RN 441790-90-5 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
7-[(5-chloro-2-benzofuranyl)sulfonyl]tetrahydro-1'-(4-pyridinyl)-, (8aR)-  
(9CI) (CA INDEX NAME)

Absolute stereochemistry.

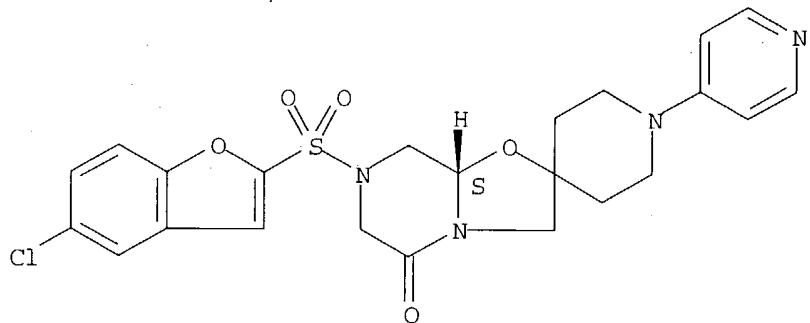


RN 441790-91-6 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,

7-[(5-chloro-2-benzofuranyl)sulfonyl]tetrahydro-1'-(4-pyridinyl)-, (8aS)-  
(9CI) (CA INDEX NAME)

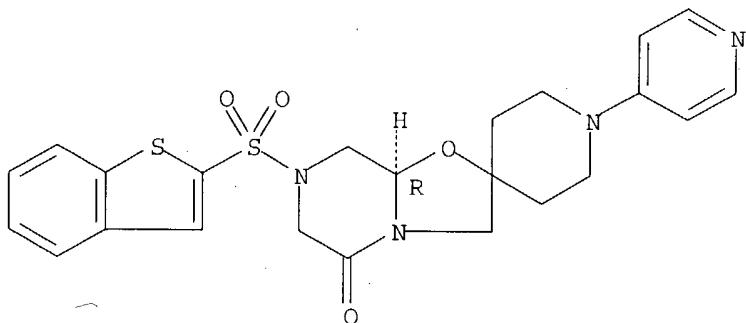
Absolute stereochemistry.



RN 441790-92-7 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
7-(benzo[b]thien-2-ylsulfonyl)tetrahydro-1'-(4-pyridinyl)-, (8aR)- (9CI)  
(CA INDEX NAME)

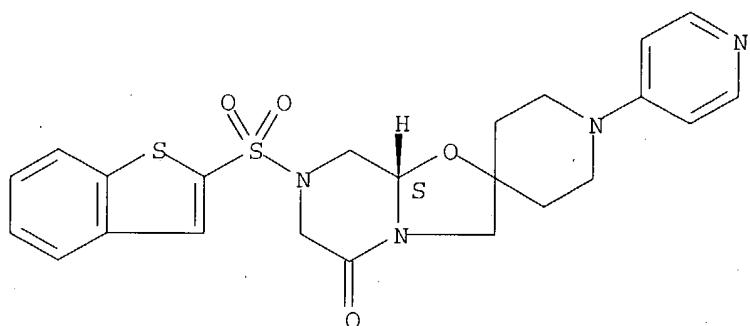
Absolute stereochemistry.



RN 441790-93-8 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
7-(benzo[b]thien-2-ylsulfonyl)tetrahydro-1'-(4-pyridinyl)-, (8aS)- (9CI)  
(CA INDEX NAME)

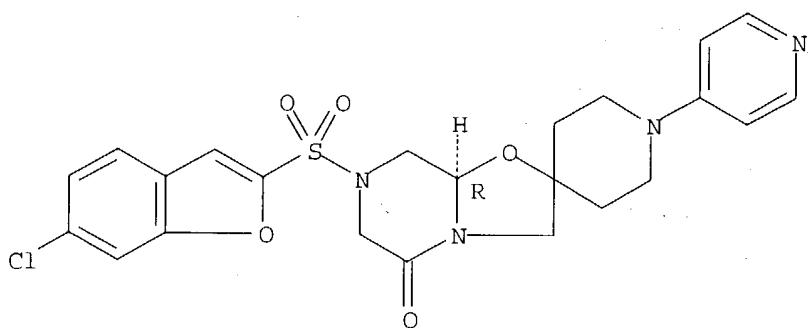
Absolute stereochemistry.



RN 441790-94-9 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
7-[(6-chloro-2-benzofuranyl)sulfonyl]tetrahydro-1'-(4-pyridinyl)-, (8aR)-  
(9CI) (CA INDEX NAME)

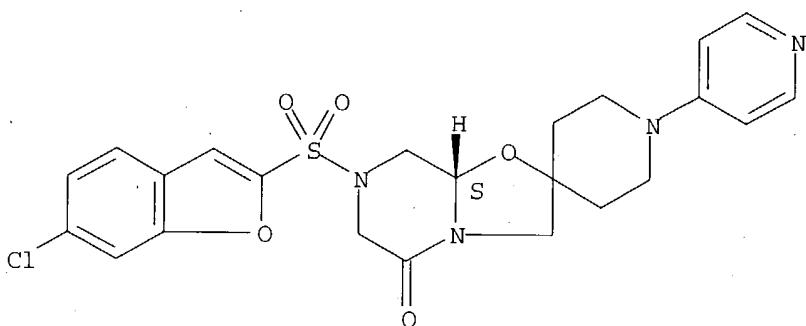
Absolute stereochemistry.



RN 441790-95-0 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
7-[(6-chloro-2-benzofuranyl)sulfonyl]tetrahydro-1'-(4-pyridinyl)-, (8aS)-  
(9CI) (CA INDEX NAME)

Absolute stereochemistry.

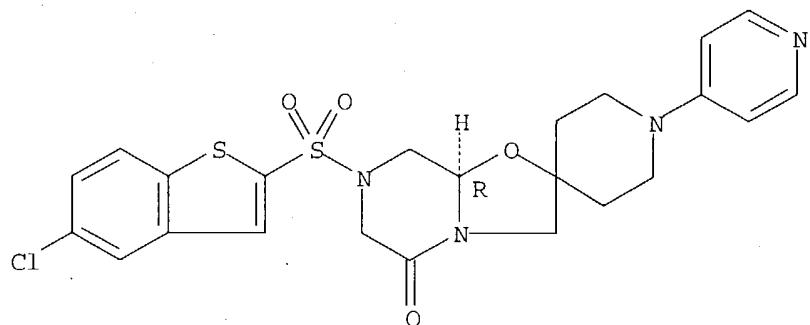


RN 441790-96-1 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,

7-[(5-chlorobenzo[b]thien-2-yl)sulfonyl]tetrahydro-1'-(4-pyridinyl)-,  
 (8aR)- (9CI) (CA INDEX NAME)

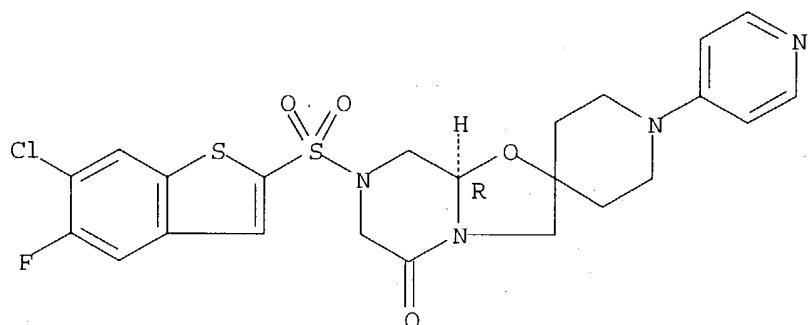
Absolute stereochemistry.



RN 441790-97-2 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
 7-[(6-chloro-5-fluorobenzo[b]thien-2-yl)sulfonyl]tetrahydro-1'-(4-  
 pyridinyl)-, (8aR)- (9CI) (CA INDEX NAME)

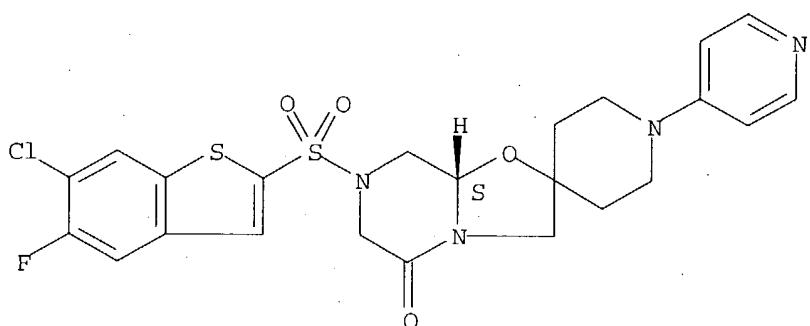
Absolute stereochemistry.



RN 441790-98-3 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
 7-[(6-chloro-5-fluorobenzo[b]thien-2-yl)sulfonyl]tetrahydro-1'-(4-  
 pyridinyl)-, (8aS)- (9CI) (CA INDEX NAME)

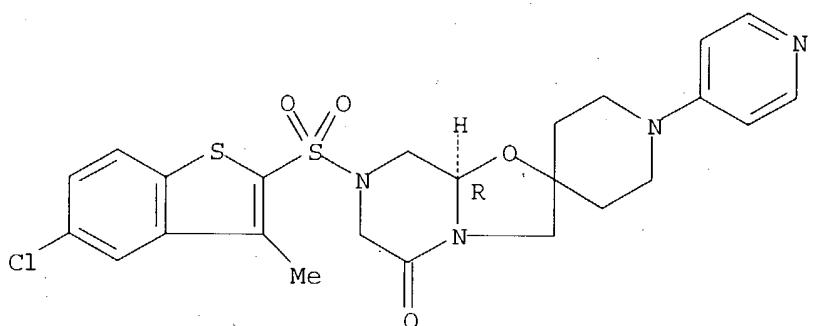
Absolute stereochemistry.



RN 441790-99-4 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
7-[(5-chloro-3-methylbenzo[b]thien-2-yl)sulfonyl]tetrahydro-1'-(4-pyridinyl)-, (8aR)- (9CI) (CA INDEX NAME)

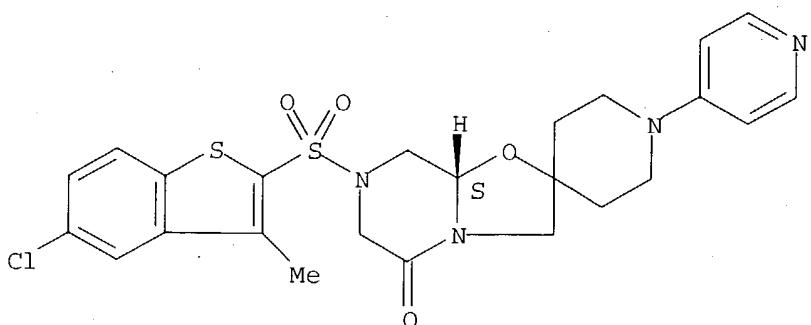
Absolute stereochemistry.



RN 441791-00-0 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
7-[(5-chloro-3-methylbenzo[b]thien-2-yl)sulfonyl]tetrahydro-1'-(4-pyridinyl)-, (8aS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

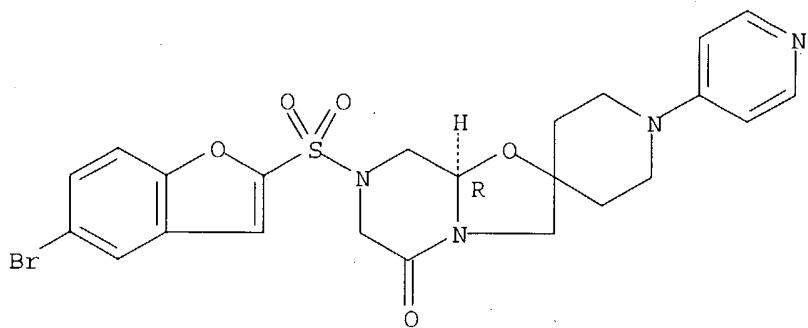


RN 441791-01-1 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,

7-[(5-bromo-2-benzofuranyl)sulfonyl]tetrahydro-1'-(4-pyridinyl)-, (8aR)-  
(9CI) (CA INDEX NAME)

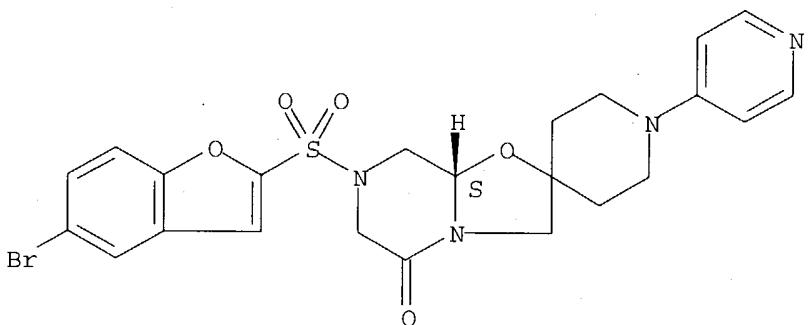
Absolute stereochemistry.



RN 441791-02-2 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
7-[(5-bromo-2-benzofuranyl)sulfonyl]tetrahydro-1'-(4-pyridinyl)-, (8aS)-  
(9CI) (CA INDEX NAME)

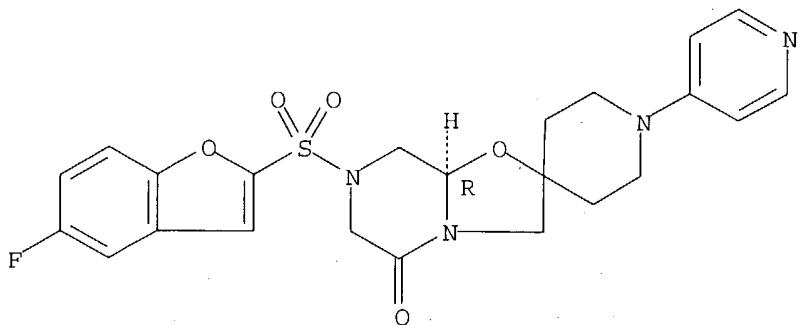
Absolute stereochemistry.



RN 441791-03-3 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
7-[(5-fluoro-2-benzofuranyl)sulfonyl]tetrahydro-1'-(4-pyridinyl)-, (8aR)-  
(9CI) (CA INDEX NAME)

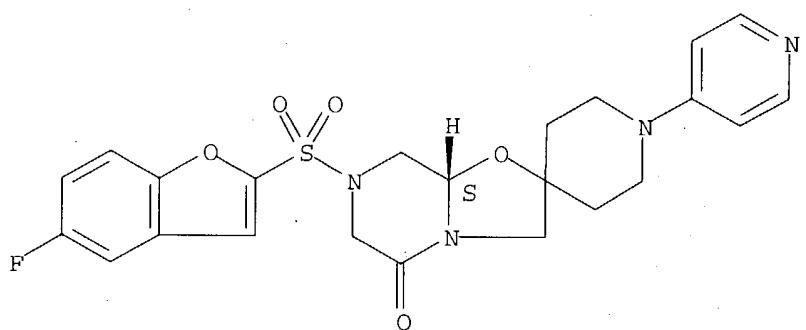
Absolute stereochemistry.



RN 441791-04-4 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
7-[(5-fluoro-2-benzofuranyl)sulfonyl]tetrahydro-1'-(4-pyridinyl)-, (8aS)-  
(9CI) (CA INDEX NAME)

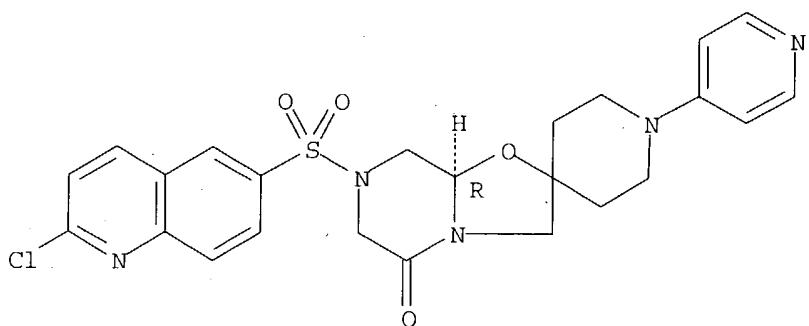
Absolute stereochemistry.



RN 441791-05-5 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
7-[(2-chloro-6-quinolinyl)sulfonyl]tetrahydro-1'-(4-pyridinyl)-, (8aR)-  
(9CI) (CA INDEX NAME)

Absolute stereochemistry.

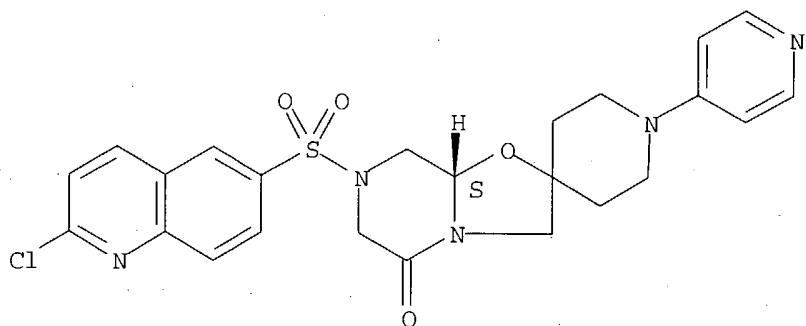


RN 441791-06-6 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,

7-[(2-chloro-6-quinolinyl)sulfonyl]tetrahydro-1'-(4-pyridinyl)-, (8aS)-  
(9CI) (CA INDEX NAME)

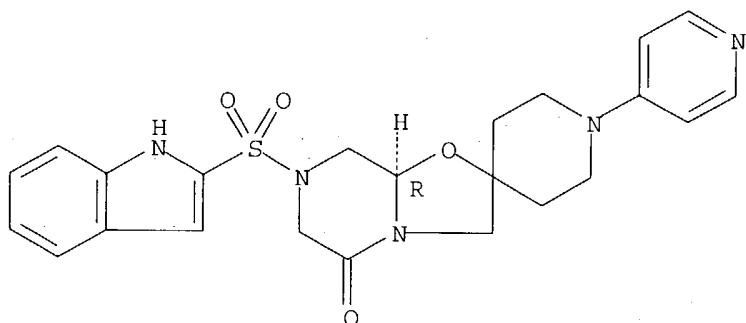
Absolute stereochemistry.



RN 441791-07-7 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
tetrahydro-7-(1H-indol-2-ylsulfonyl)-1'-(4-pyridinyl)-, (8aR)- (9CI) (CA  
INDEX NAME)

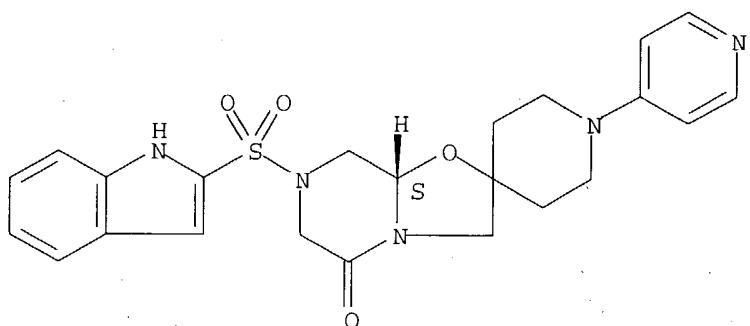
Absolute stereochemistry.



RN 441791-08-8 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
tetrahydro-7-(1H-indol-2-ylsulfonyl)-1'-(4-pyridinyl)-, (8aS)- (9CI) (CA  
INDEX NAME)

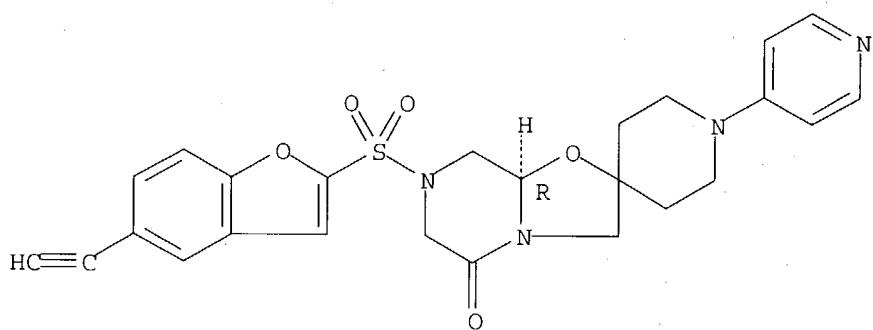
Absolute stereochemistry.



RN 441791-09-9 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
7-[(5-ethynyl-2-benzofuranyl)sulfonyl]tetrahydro-1'-(4-pyridinyl)-, (8aR)-  
(9CI) (CA INDEX NAME)

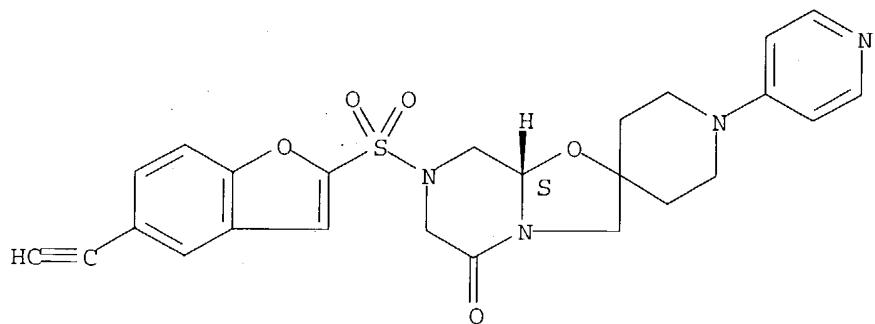
Absolute stereochemistry.



RN 441791-10-2 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
7-[(5-ethynyl-2-benzofuranyl)sulfonyl]tetrahydro-1'-(4-pyridinyl)-, (8aS)-  
(9CI) (CA INDEX NAME)

Absolute stereochemistry.

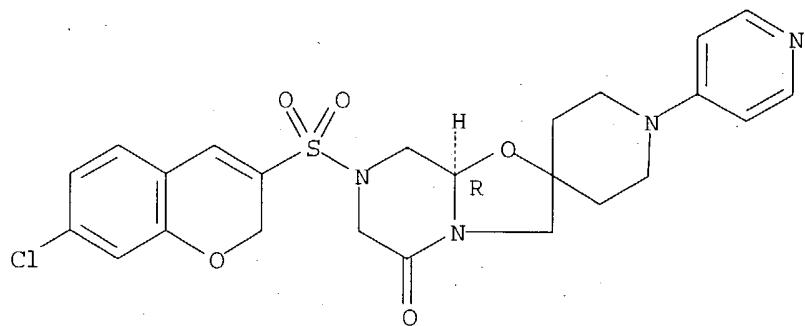


RN 441791-11-3 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,

7-[(7-chloro-2H-1-benzopyran-3-yl)sulfonyl]tetrahydro-1'-(4-pyridinyl)-,  
(8aR)- (9CI) (CA INDEX NAME)

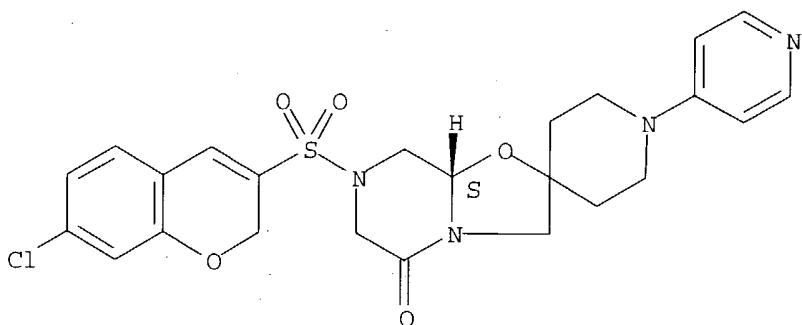
Absolute stereochemistry.



RN 441791-12-4 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
7-[(7-chloro-2H-1-benzopyran-3-yl)sulfonyl]tetrahydro-1'-(4-pyridinyl)-,  
(8aS)- (9CI) (CA INDEX NAME)

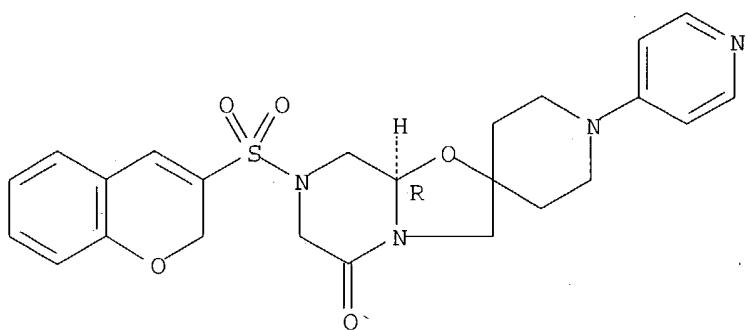
Absolute stereochemistry.



RN 441791-13-5 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
7-(2H-1-benzopyran-3-ylsulfonyl)tetrahydro-1'-(4-pyridinyl)-, (8aR)- (9CI)  
(CA INDEX NAME)

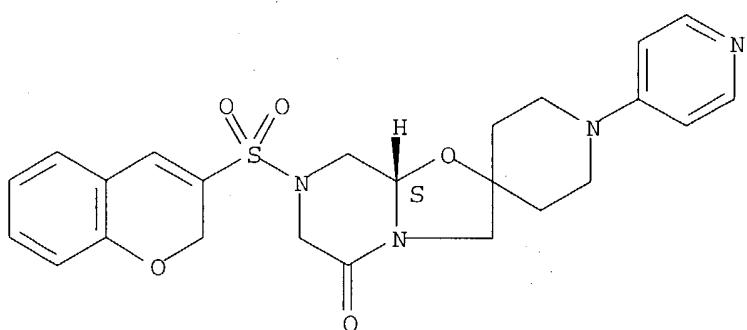
Absolute stereochemistry.



RN 441791-14-6 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
7-[(2H-1-benzopyran-3-ylsulfonyl)tetrahydro-1'-(4-pyridinyl)-, (8aS)- (9CI)  
(CA INDEX NAME)

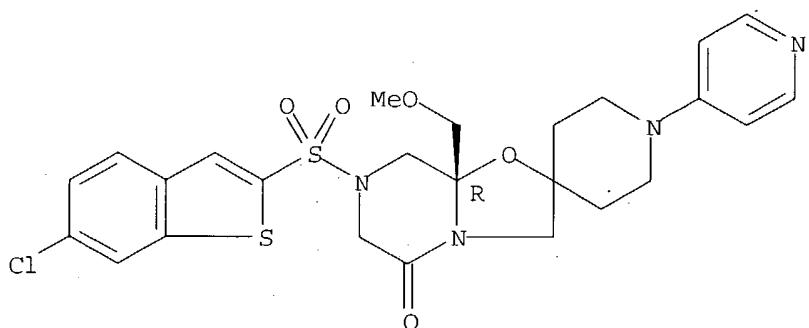
Absolute stereochemistry.



RN 441791-15-7 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
7-[(6-chlorobenzo[b]thien-2-yl)sulfonyl]tetrahydro-8a-(methoxymethyl)-1'-(4-pyridinyl)-, (8aR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

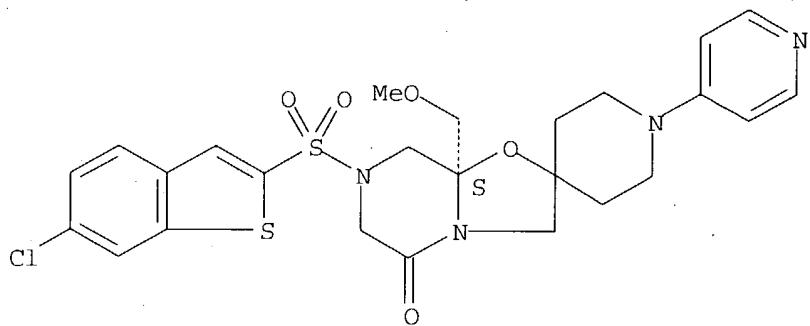


RN 441791-16-8 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,

7-[(6-chlorobenzo[b]thien-2-yl)sulfonyl]tetrahydro-8a-(methoxymethyl)-1'-(4-pyridinyl)-, (8aS)- (9CI) (CA INDEX NAME)

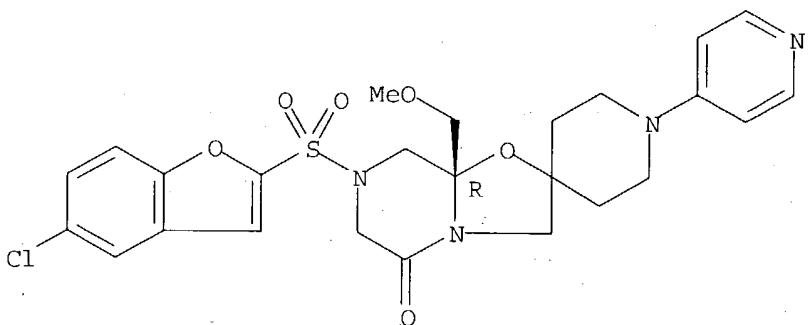
Absolute stereochemistry.



RN 441791-19-1 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
7-[(5-chloro-2-benzofuranyl)sulfonyl]tetrahydro-8a-(methoxymethyl)-1'-(4-pyridinyl)-, (8aR)- (9CI) (CA INDEX NAME)

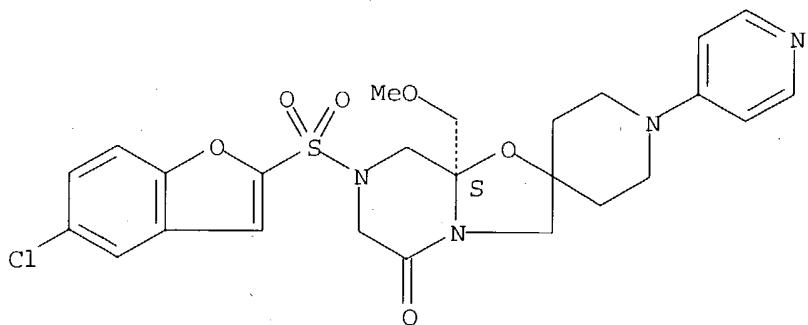
Absolute stereochemistry.



RN 441791-20-4 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
7-[(5-chloro-2-benzofuranyl)sulfonyl]tetrahydro-8a-(methoxymethyl)-1'-(4-pyridinyl)-, (8aS)- (9CI) (CA INDEX NAME)

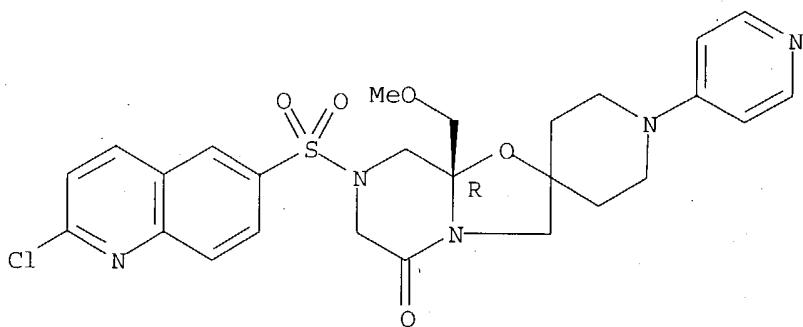
Absolute stereochemistry..



RN 441791-21-5 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
7-[(2-chloro-6-quinolinyl)sulfonyl]tetrahydro-8a-(methoxymethyl)-1'-(4-pyridinyl)-, (8aR)- (9CI) (CA INDEX NAME)

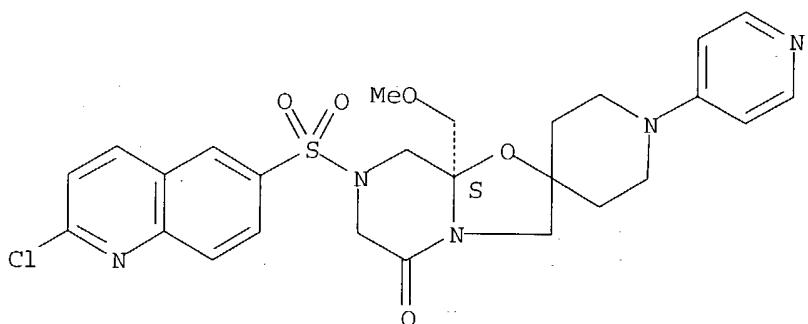
Absolute stereochemistry.



RN 441791-22-6 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
7-[(2-chloro-6-quinolinyl)sulfonyl]tetrahydro-8a-(methoxymethyl)-1'-(4-pyridinyl)-, (8aS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

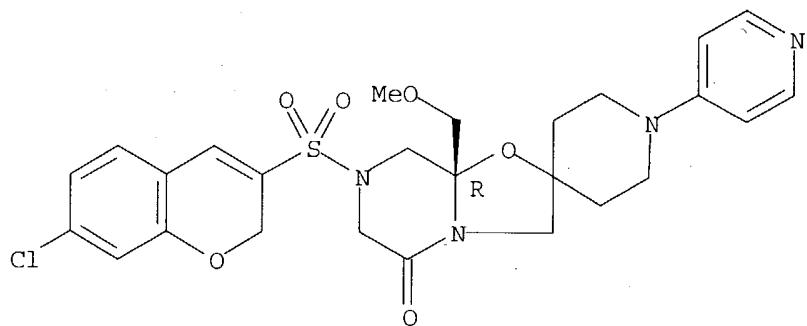


RN 441791-23-7 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,

7-[(7-chloro-2H-1-benzopyran-3-yl)sulfonyl]tetrahydro-8a-(methoxymethyl)-  
1'-(4-pyridinyl)-, (8aR) - (9CI) (CA INDEX NAME)

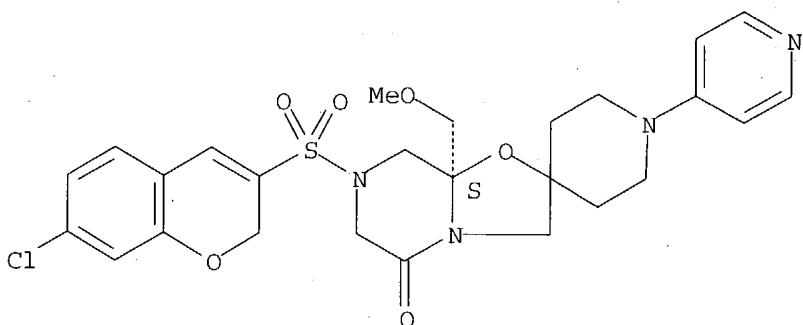
Absolute stereochemistry.



RN 441791-24-8 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
7-[(7-chloro-2H-1-benzopyran-3-yl)sulfonyl]tetrahydro-8a-(methoxymethyl)-  
1'-(4-pyridinyl)-, (8aS) - (9CI) (CA INDEX NAME)

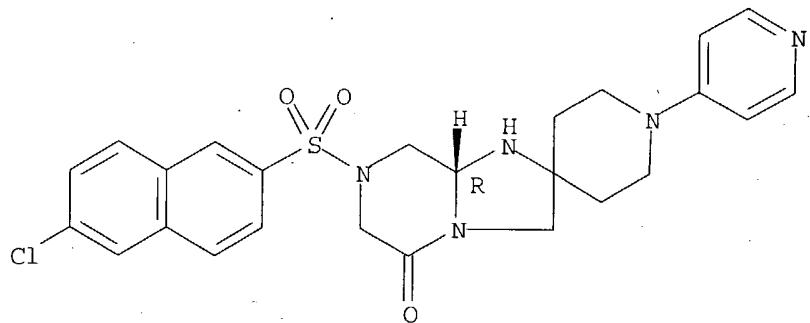
Absolute stereochemistry.



RN 441791-25-9 CAPLUS

CN Spiro[imidazo[1,2-a]pyrazine-2(3H),4'-piperidin]-5(1H)-one,  
7-[(6-chloro-2-naphthalenyl)sulfonyl]tetrahydro-1'-(4-pyridinyl)-, (8aR) -  
(9CI) (CA INDEX NAME)

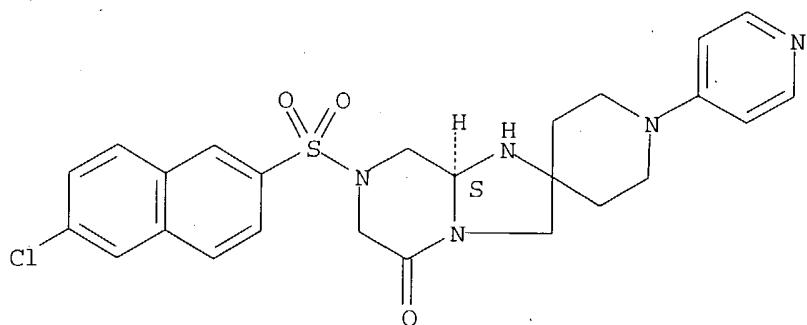
Absolute stereochemistry.



RN 441791-26-0 CAPLUS

CN Spiro[imidazo[1,2-a]pyrazine-2(3H),4'-piperidin]-5(1H)-one,  
7-[(6-chloro-2-naphthalenyl)sulfonyl]tetrahydro-1'-(4-pyridinyl)-, (8aS)-  
(9CI) (CA INDEX NAME)

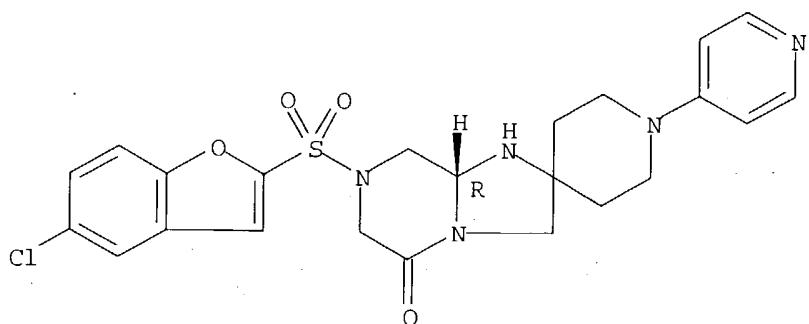
Absolute stereochemistry.



RN 441791-27-1 CAPLUS

CN Spiro[imidazo[1,2-a]pyrazine-2(3H),4'-piperidin]-5(1H)-one,  
7-[(5-chloro-2-benzofuranyl)sulfonyl]tetrahydro-1'-(4-pyridinyl)-, (8aR)-  
(9CI) (CA INDEX NAME)

Absolute stereochemistry.

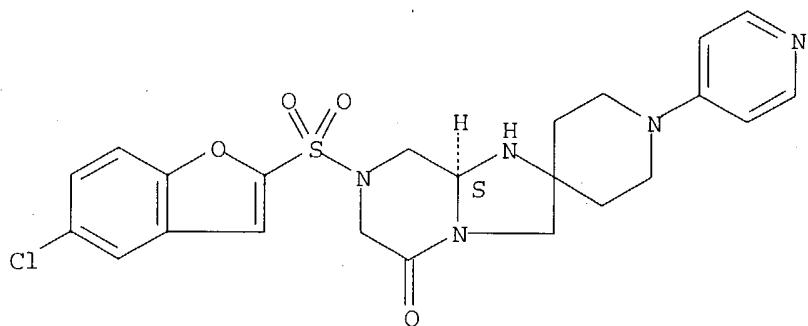


RN 441791-28-2 CAPLUS

CN Spiro[imidazo[1,2-a]pyrazine-2(3H),4'-piperidin]-5(1H)-one,

7-[(5-chloro-2-benzofuranyl)sulfonyl]tetrahydro-1'-(4-pyridinyl)-, (8aS)-  
(9CI) (CA INDEX NAME)

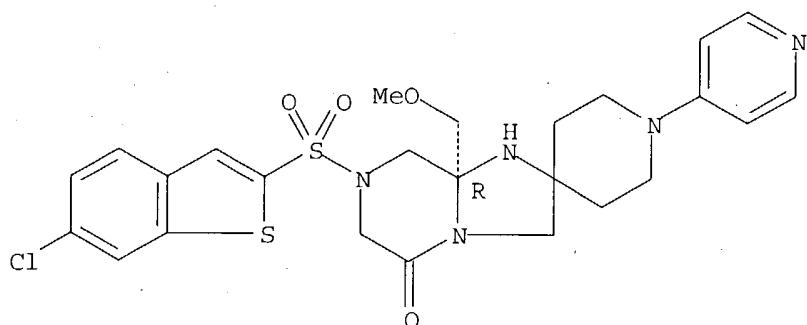
Absolute stereochemistry.



RN 441791-46-4 CAPLUS

CN Spiro[imidazo[1,2-a]pyrazine-2(3H),4'-piperidin]-5(1H)-one,  
7-[(6-chlorobenzo[b]thien-2-yl)sulfonyl]tetrahydro-8a-(methoxymethyl)-1'-  
(4-pyridinyl)-, (8aR)- (9CI) (CA INDEX NAME)

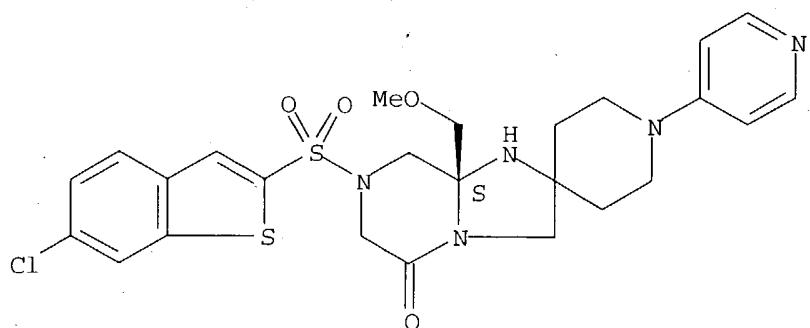
Absolute stereochemistry.



RN 441791-49-7 CAPLUS

CN Spiro[imidazo[1,2-a]pyrazine-2(3H),4'-piperidin]-5(1H)-one,  
7-[(6-chlorobenzo[b]thien-2-yl)sulfonyl]tetrahydro-8a-(methoxymethyl)-1'-  
(4-pyridinyl)-, (8aS)- (9CI) (CA INDEX NAME)

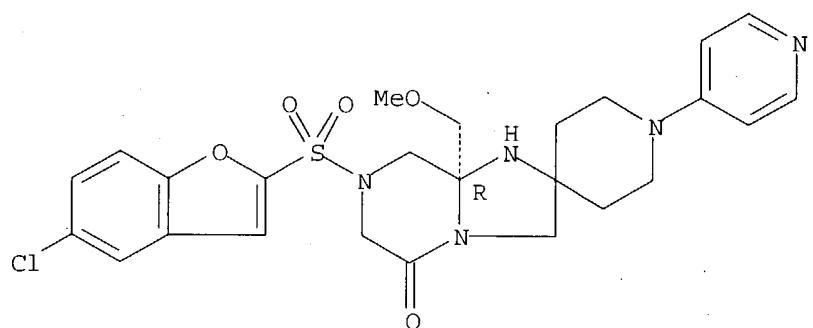
Absolute stereochemistry.



RN 441791-52-2 CAPLUS

CN Spiro[imidazo[1,2-a]pyrazine-2(3H),4'-piperidin]-5(1H)-one,  
7-[(5-chloro-2-benzofuranyl)sulfonyl]tetrahydro-8a-(methoxymethyl)-1'-(4-pyridinyl)-, (8aR)- (9CI) (CA INDEX NAME)

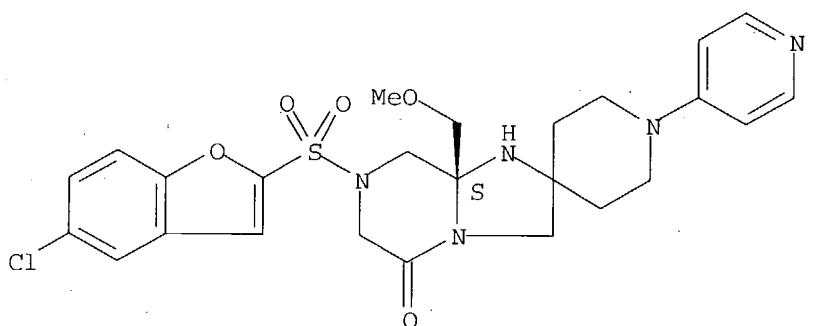
Absolute stereochemistry.



RN 441791-53-3 CAPLUS

CN Spiro[imidazo[1,2-a]pyrazine-2(3H),4'-piperidin]-5(1H)-one,  
7-[(5-chloro-2-benzofuranyl)sulfonyl]tetrahydro-8a-(methoxymethyl)-1'-(4-pyridinyl)-, (8aS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

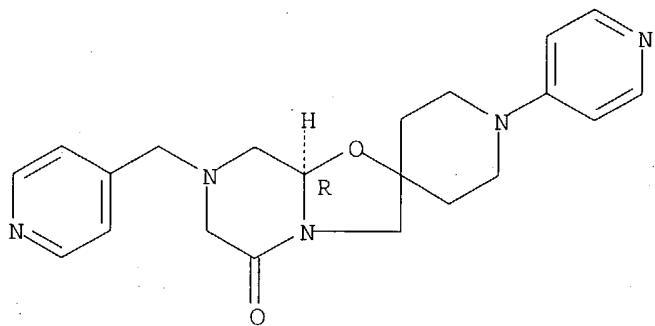


RN 441791-60-2 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,

tetrahydro-1'-(4-pyridinyl)-7-(4-pyridinylmethyl)-, (8aR)- (9CI) (CA INDEX NAME)

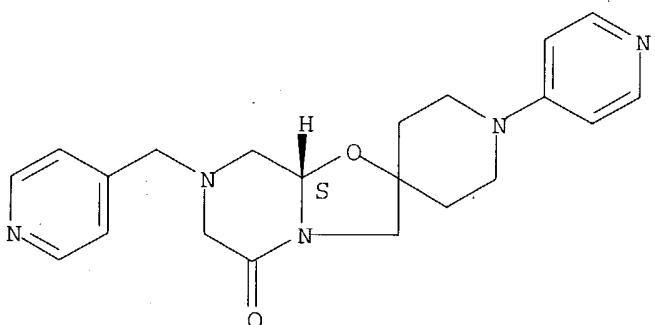
Absolute stereochemistry.



RN 441791-61-3 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
tetrahydro-1'-(4-pyridinyl)-7-(4-pyridinylmethyl)-, (8aS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

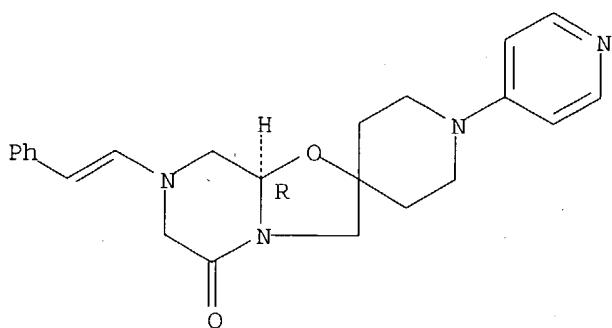


RN 441791-62-4 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
tetrahydro-7-(2-phenylethenyl)-1'-(4-pyridinyl)-, (8aR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry unknown.

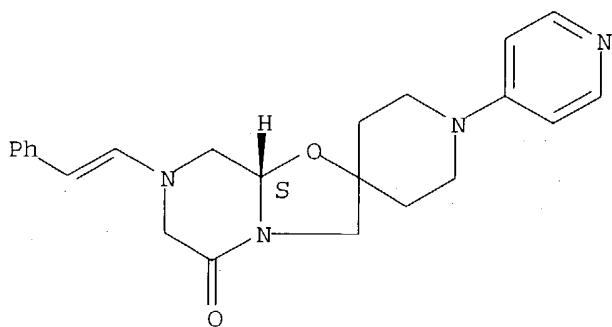


RN 441791-63-5 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
tetrahydro-7-(2-phenylethenyl)-1'-(4-pyridinyl)-, (8aS)- (9CI) (CA INDEX  
NAME)

Absolute stereochemistry.

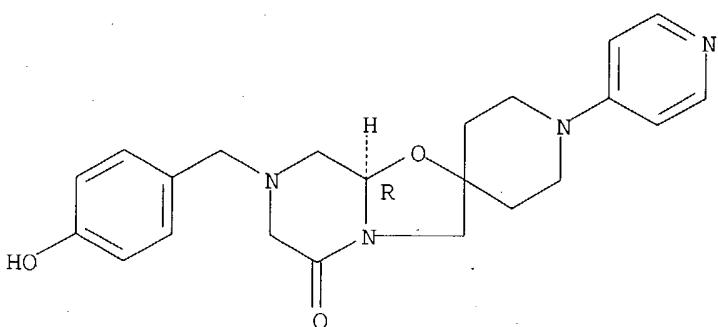
Double bond geometry unknown.



RN 441791-64-6 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
tetrahydro-7-[4-hydroxyphenyl)methyl]-1'-(4-pyridinyl)-, (8aR)- (9CI)  
(CA INDEX NAME)

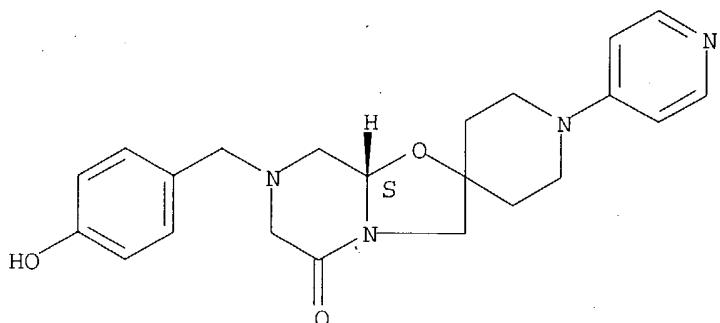
Absolute stereochemistry.



RN 441791-65-7 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
tetrahydro-7-[(4-hydroxyphenyl)methyl]-1'-(4-pyridinyl)-, (8aS)- (9CI)  
(CA INDEX NAME)

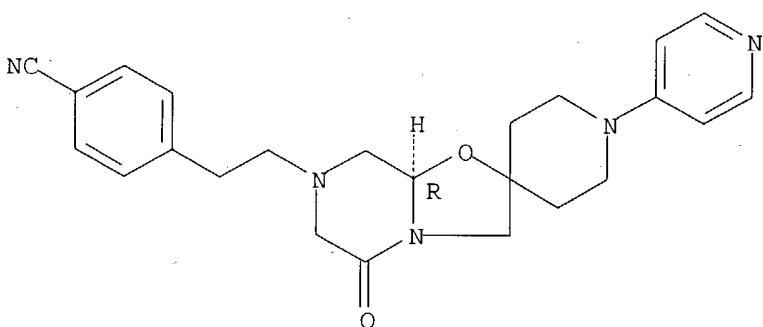
Absolute stereochemistry.



RN 441791-68-0 CAPLUS

CN Benzonitrile, 4-[2-[(8aR)-tetrahydro-5-oxo-1'-(4-pyridinyl)spiro[7H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-7-yl]ethyl]- (9CI) (CA INDEX NAME)

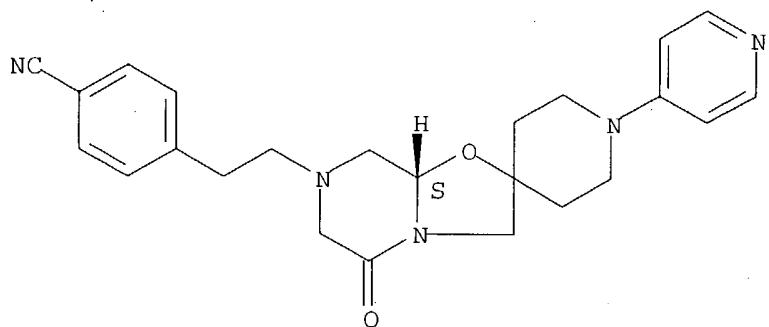
Absolute stereochemistry.



RN 441791-69-1 CAPLUS

CN Benzonitrile, 4-[2-[(8aS)-tetrahydro-5-oxo-1'-(4-pyridinyl)spiro[7H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-7-yl]ethyl]- (9CI) (CA INDEX NAME)

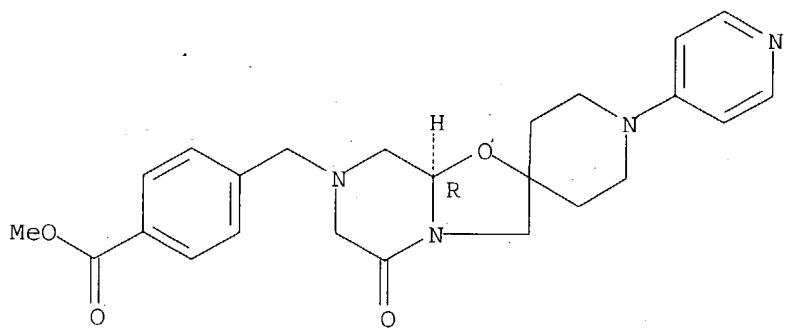
Absolute stereochemistry.



RN 441791-70-4 CAPLUS

CN Benzoic acid, 4-[(8aR)-tetrahydro-5-oxo-1'-(4-pyridinyl)spiro[7H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-7-yl]methyl-, methyl ester (9CI) (CA INDEX NAME)

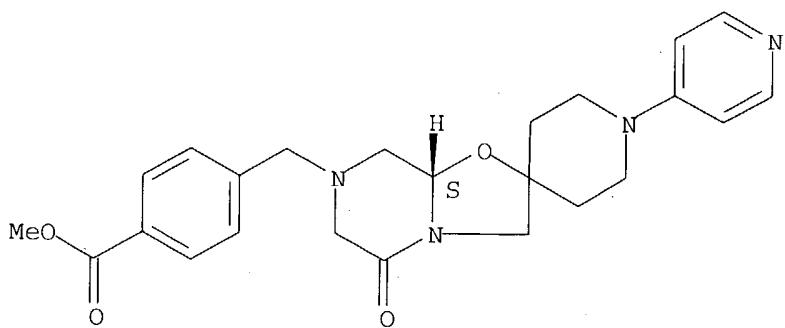
Absolute stereochemistry.



RN 441791-71-5 CAPLUS

CN Benzoic acid, 4-[(8aS)-tetrahydro-5-oxo-1'-(4-pyridinyl)spiro[7H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-7-yl]methyl-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

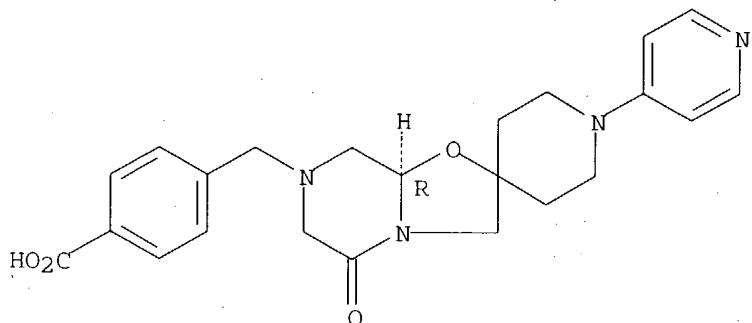


RN 441791-72-6 CAPLUS

CN Benzoic acid, 4-[(8aR)-tetrahydro-5-oxo-1'-(4-pyridinyl)spiro[7H-

oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-7-yl)methyl]-, sodium salt  
(9CI) (CA INDEX NAME)

Absolute stereochemistry.

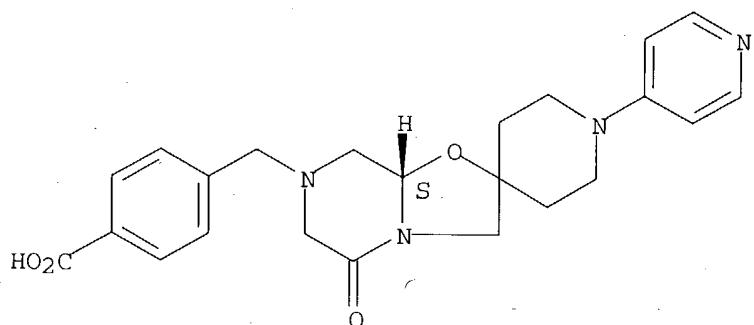


● Na

RN 441791-73-7 CAPLUS

CN Benzoic acid, 4-[(8aS)-tetrahydro-5-oxo-1'-(4-pyridinyl)spiro[7H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-7-yl)methyl]-, sodium salt  
(9CI) (CA INDEX NAME)

Absolute stereochemistry.

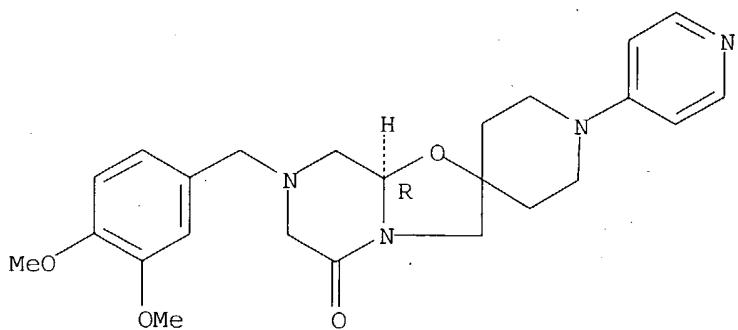


● Na

RN 441791-74-8 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
7-[(3,4-dimethoxyphenyl)methyl]tetrahydro-1'-(4-pyridinyl)-, (8aR)- (9CI)  
(CA INDEX NAME)

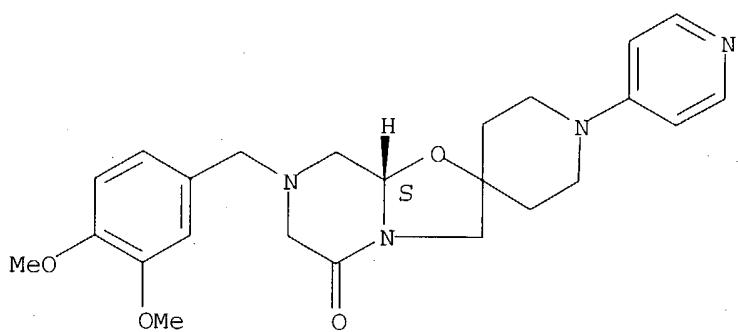
Absolute stereochemistry.



RN 441791-75-9 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
7-[ (3,4-dimethoxyphenyl)methyl]tetrahydro-1'- (4-pyridinyl)-, (8aS)- (9CI)  
(CA INDEX NAME)

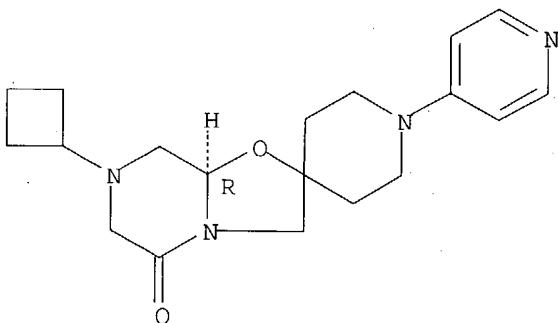
Absolute stereochemistry.



RN 441791-76-0 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
7-cyclobutyltetrahydro-1'- (4-pyridinyl)-, (8aR)- (9CI) (CA INDEX NAME)

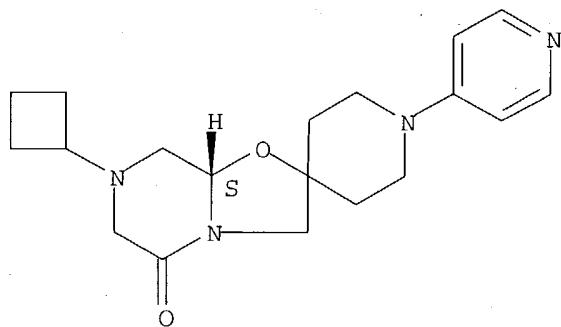
Absolute stereochemistry.



RN 441791-77-1 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
7-cyclobutyltetrahydro-1'- (4-pyridinyl)-, (8aS)- (9CI) (CA INDEX NAME)

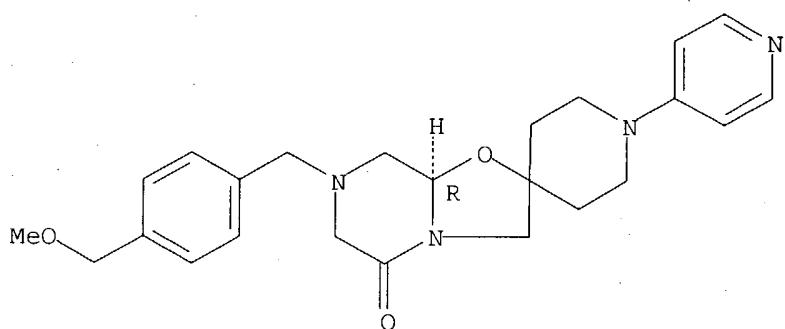
Absolute stereochemistry.



RN 441791-78-2 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one, tetrahydro-7-[4-(methoxymethyl)phenyl]methyl]-1'-(4-pyridinyl)-, (8aR)- (9CI) (CA INDEX NAME)

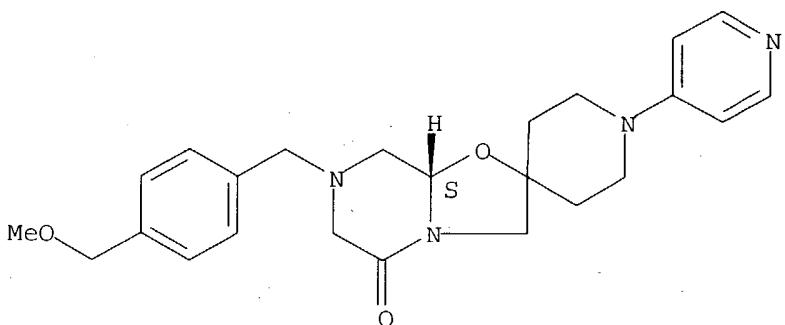
Absolute stereochemistry.



RN 441791-79-3 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one, tetrahydro-7-[4-(methoxymethyl)phenyl]methyl]-1'-(4-pyridinyl)-, (8aS)- (9CI) (CA INDEX NAME)

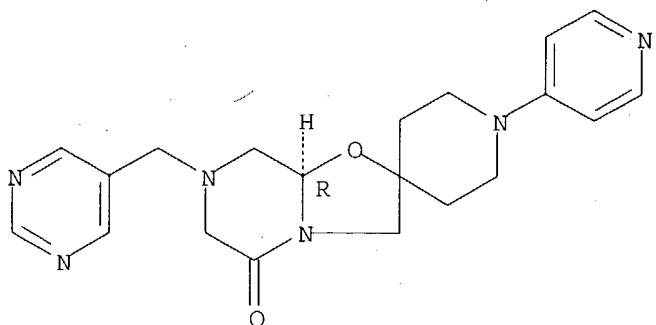
Absolute stereochemistry.



RN 441791-80-6 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
tetrahydro-1'-(4-pyridinyl)-7-(5-pyrimidinylmethyl)-, (8aR)- (9CI) (CA  
INDEX NAME)

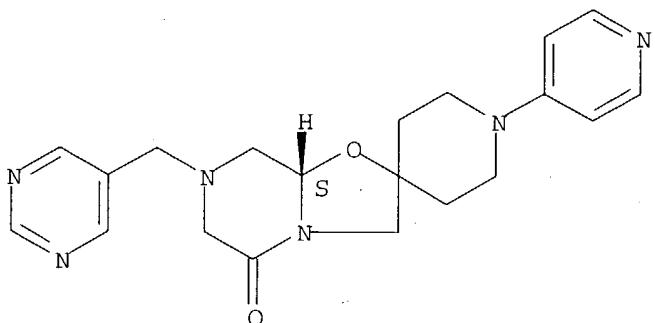
Absolute stereochemistry.



RN 441791-81-7 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
tetrahydro-1'-(4-pyridinyl)-7-(5-pyrimidinylmethyl)-, (8aS)- (9CI) (CA  
INDEX NAME)

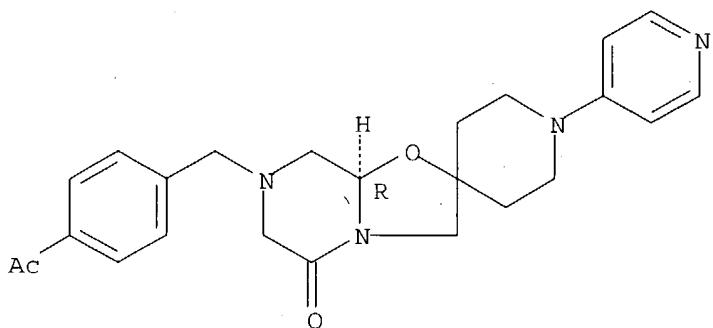
Absolute stereochemistry.



RN 441791-82-8 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
7-[(4-acetylphenyl)methyl]tetrahydro-1'-(4-pyridinyl)-, (8aR)- (9CI) (CA  
INDEX NAME)

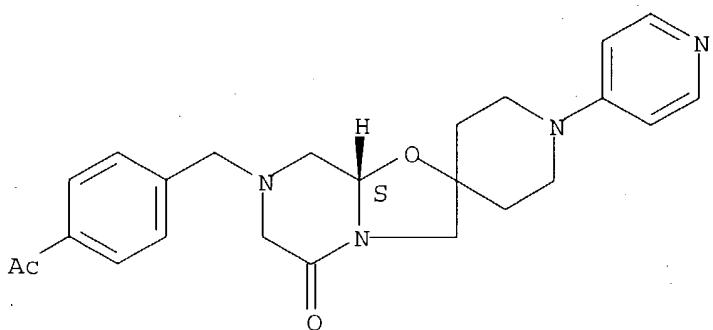
Absolute stereochemistry.



RN 441791-83-9 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
7-[(4-acetylphenyl)methyl]tetrahydro-1'-(4-pyridinyl)-, (8aS)- (9CI) (CA  
INDEX NAME)

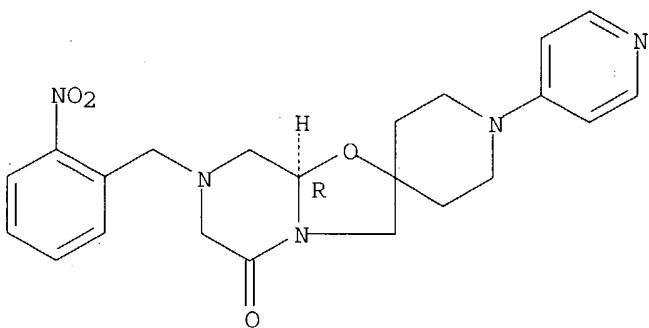
Absolute stereochemistry.



RN 441791-84-0 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
tetrahydro-7-[(2-nitrophenyl)methyl]-1'-(4-pyridinyl)-, (8aR)- (9CI) (CA  
INDEX NAME)

Absolute stereochemistry.

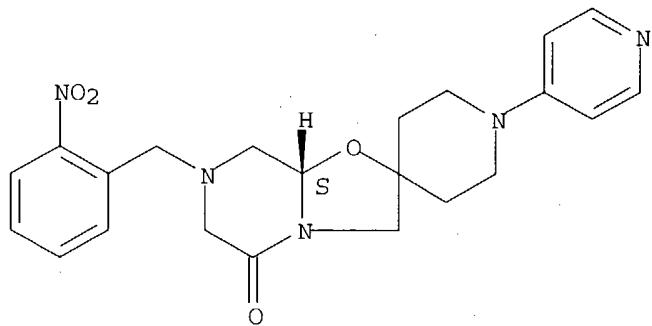


RN 441791-85-1 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,

tetrahydro-7-[(2-nitrophenyl)methyl]-1'-(4-pyridinyl)-, (8aS)- (9CI) (CA INDEX NAME)

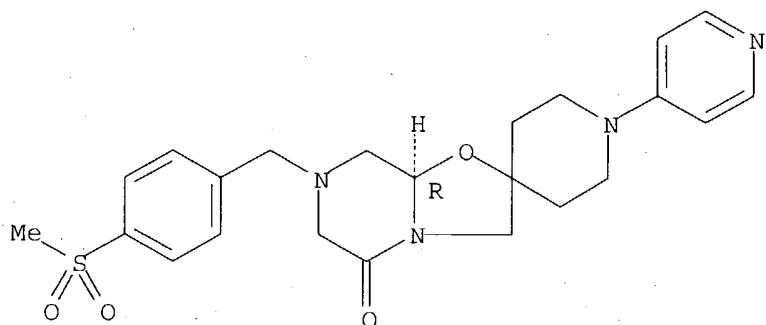
Absolute stereochemistry.



RN 441791-86-2 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
tetrahydro-7-[(4-(methylsulfonyl)phenyl)methyl]-1'-(4-pyridinyl)-, (8aR)-  
(9CI) (CA INDEX NAME)

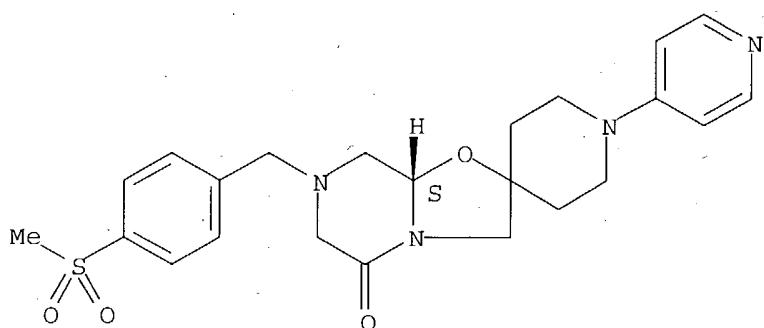
Absolute stereochemistry.



RN 441791-87-3 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
tetrahydro-7-[(4-(methylsulfonyl)phenyl)methyl]-1'-(4-pyridinyl)-, (8aS)-  
(9CI) (CA INDEX NAME)

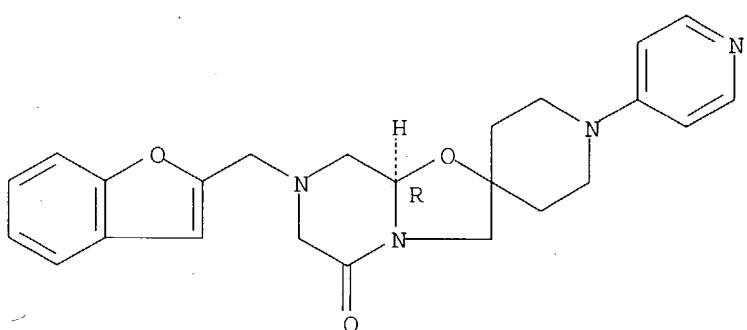
Absolute stereochemistry.



RN 441791-88-4 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
7-(2-benzofuranyl methyl)tetrahydro-1'-(4-pyridinyl)-, (8aR)- (9CI) (CA  
INDEX NAME)

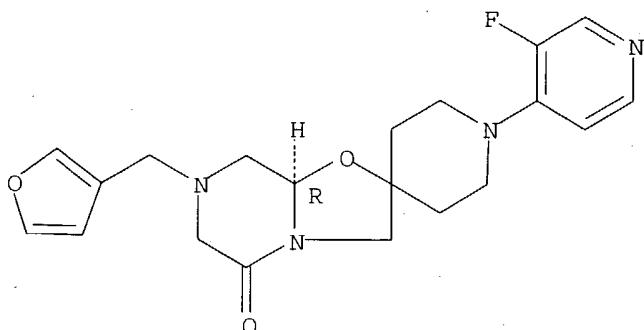
Absolute stereochemistry.



RN 441791-89-5 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
1'-(3-fluoro-4-pyridinyl)-7-(3-furanylmethyl)tetrahydro-, (8aR)- (9CI)  
(CA INDEX NAME)

Absolute stereochemistry.

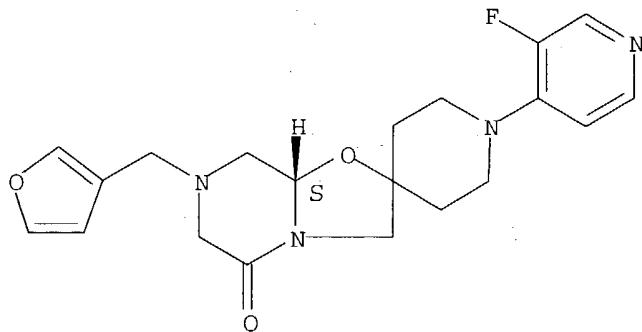


RN 441791-90-8 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,

1'-(3-fluoro-4-pyridinyl)-7-(3-furanyl methyl)tetrahydro-, (8aS)- (9CI)  
 (CA INDEX NAME)

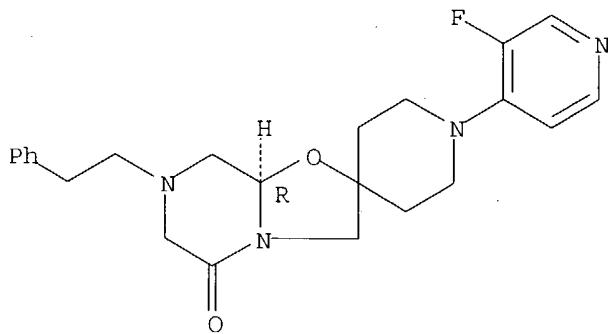
Absolute stereochemistry.



RN 441791-91-9 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
 1'-(3-fluoro-4-pyridinyl)tetrahydro-7-(2-phenylethyl)-, (8aR)- (9CI) (CA  
 INDEX NAME)

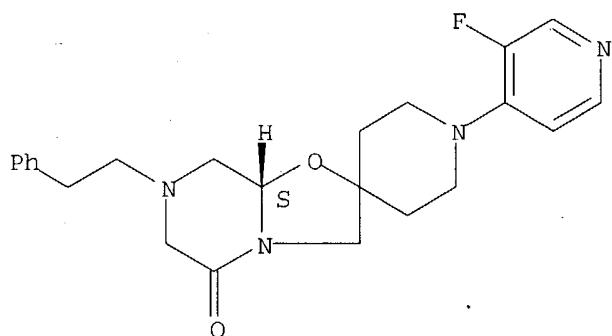
Absolute stereochemistry.



RN 441791-92-0 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
 1'-(3-fluoro-4-pyridinyl)tetrahydro-7-(2-phenylethyl)-, (8aS)- (9CI) (CA  
 INDEX NAME)

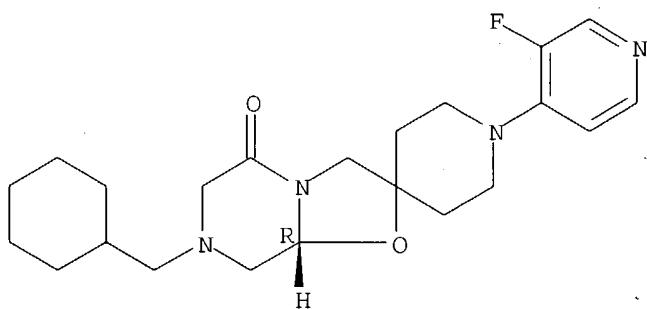
Absolute stereochemistry.



RN 441791-93-1 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
7-(cyclohexylmethyl)-1'-(3-fluoro-4-pyridinyl)tetrahydro-, (8aR)- (9CI)  
(CA INDEX NAME)

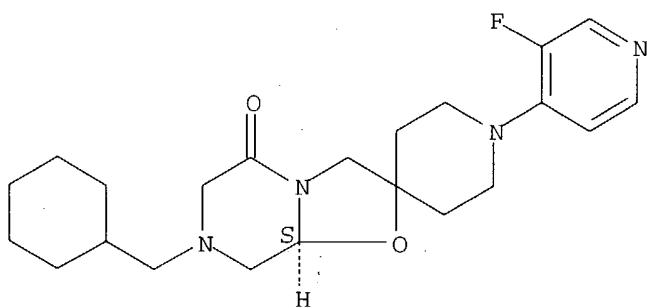
Absolute stereochemistry.



RN 441791-95-3 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
7-(cyclohexylmethyl)-1'-(3-fluoro-4-pyridinyl)tetrahydro-, (8aS)- (9CI)  
(CA INDEX NAME)

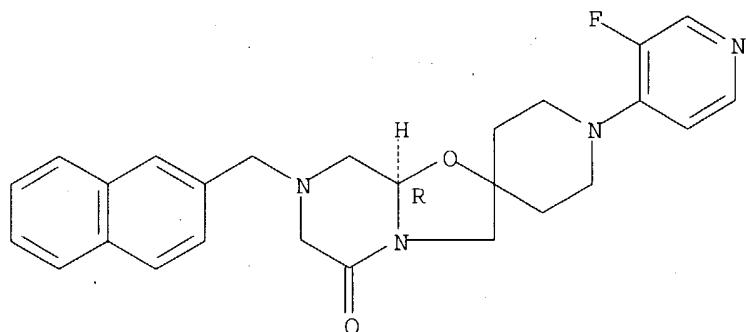
Absolute stereochemistry.



RN 441791-97-5 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
1'-(3-fluoro-4-pyridinyl)tetrahydro-7-(2-naphthalenylmethyl)-, (8aR)-  
(9CI) (CA INDEX NAME)

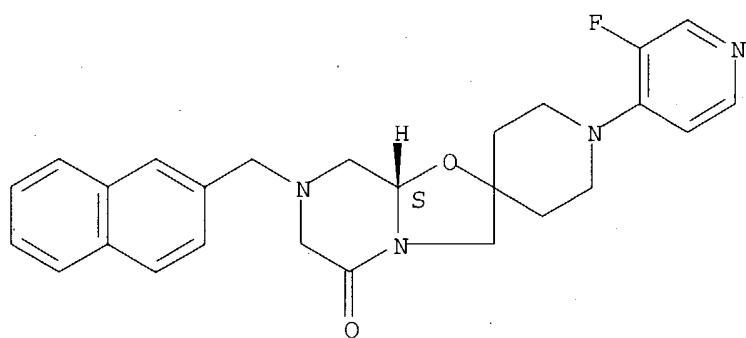
Absolute stereochemistry.



RN 441791-98-6 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
1'-(3-fluoro-4-pyridinyl)tetrahydro-7-(2-naphthalenylmethyl)-, (8aS)-  
(9CI) (CA INDEX NAME)

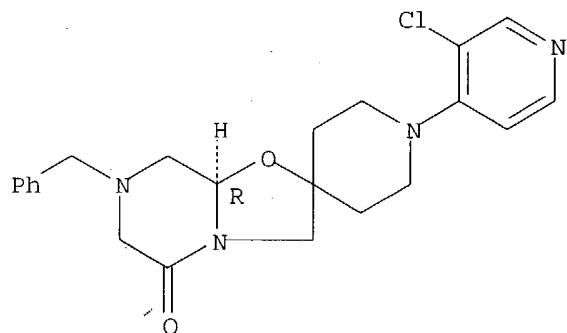
Absolute stereochemistry.



RN 441791-99-7 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
1'-(3-chloro-4-pyridinyl)tetrahydro-7-(phenylmethyl)-, (8aR)- (9CI) (CA  
INDEX NAME)

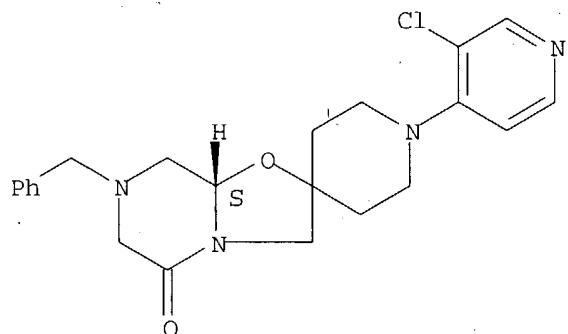
Absolute stereochemistry.



RN 441792-00-3 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
1'-(3-chloro-4-pyridinyl)tetrahydro-7-(phenylmethyl)-, (8aS)- (9CI) (CA  
INDEX NAME)

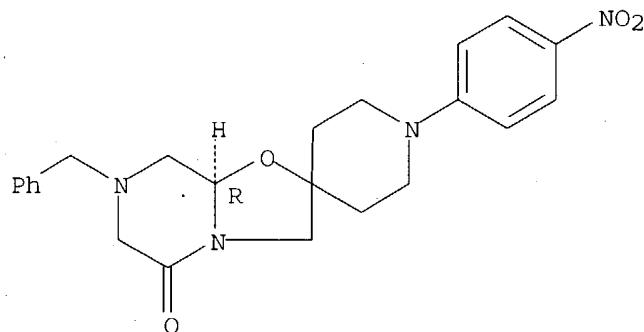
Absolute stereochemistry.



RN 441792-01-4 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
tetrahydro-1'-(4-nitrophenyl)-7-(phenylmethyl)-, (8aR)- (9CI) (CA INDEX  
NAME)

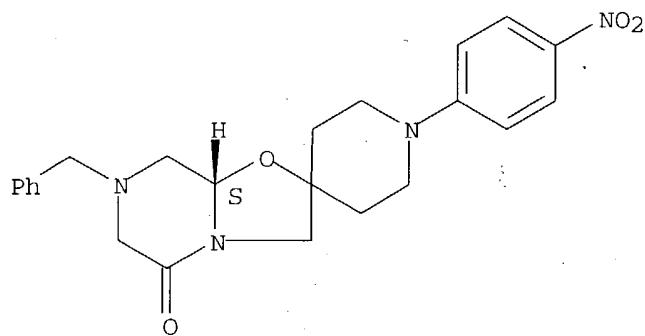
Absolute stereochemistry.



RN 441792-02-5 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
tetrahydro-1'-(4-nitrophenyl)-7-(phenylmethyl)-, (8aS)- (9CI) (CA INDEX  
NAME)

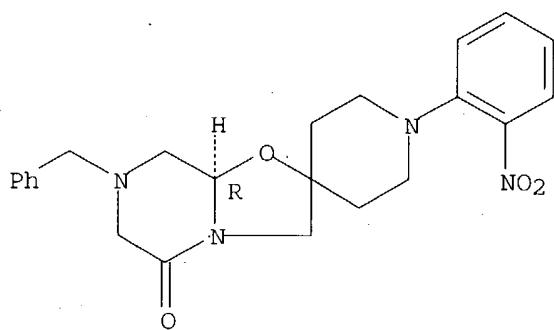
Absolute stereochemistry.



RN 441792-03-6 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
tetrahydro-1'-(2-nitrophenyl)-7-(phenylmethyl)-, (8aR)- (9CI) (CA INDEX  
NAME)

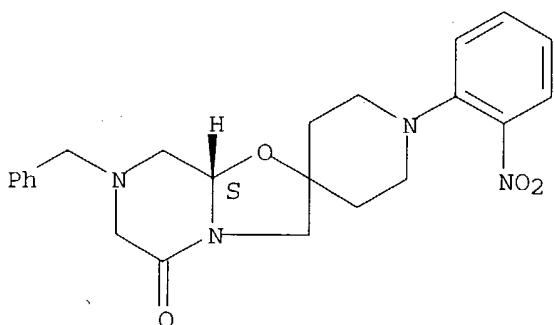
Absolute stereochemistry.



RN 441792-04-7 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
tetrahydro-1'-(2-nitrophenyl)-7-(phenylmethyl)-, (8aS)- (9CI) (CA INDEX  
NAME)

Absolute stereochemistry.

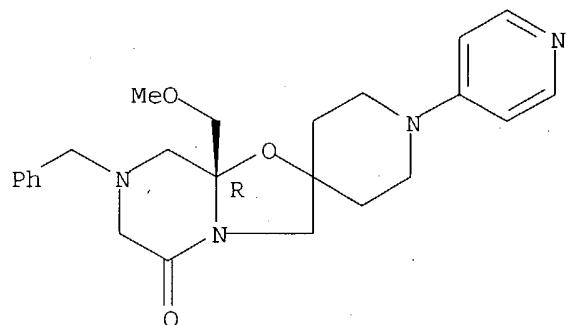


RN 441792-05-8 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,

tetrahydro-8a-(methoxymethyl)-7-(phenylmethyl)-1'-(4-pyridinyl)-, (8aR)-  
(9CI) (CA INDEX NAME)

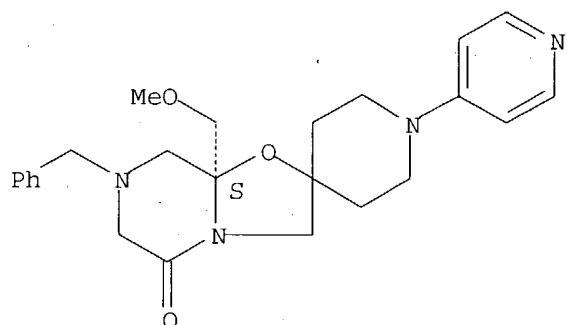
Absolute stereochemistry.



RN 441792-06-9 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
tetrahydro-8a-(methoxymethyl)-7-(phenylmethyl)-1'-(4-pyridinyl)-, (8aS)-  
(9CI) (CA INDEX NAME)

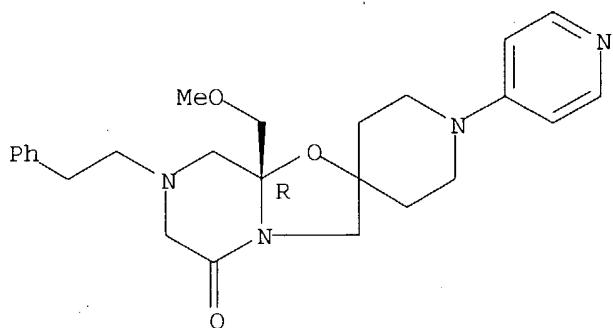
Absolute stereochemistry.



RN 441792-07-0 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
tetrahydro-8a-(methoxymethyl)-7-(2-phenylethyl)-1'-(4-pyridinyl)-, (8aR)-  
(9CI) (CA INDEX NAME)

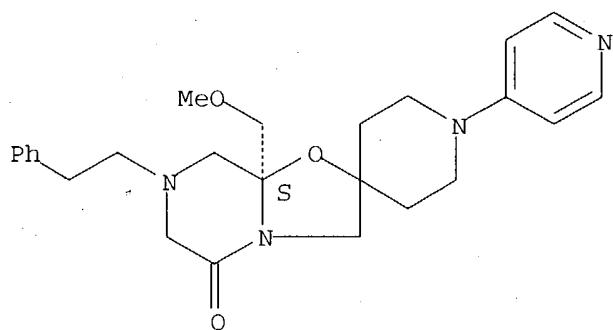
Absolute stereochemistry.



RN 441792-08-1 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
tetrahydro-8a-(methoxymethyl)-7-(2-phenylethyl)-1'-(4-pyridinyl)-, (8aS)-  
(9CI) (CA INDEX NAME)

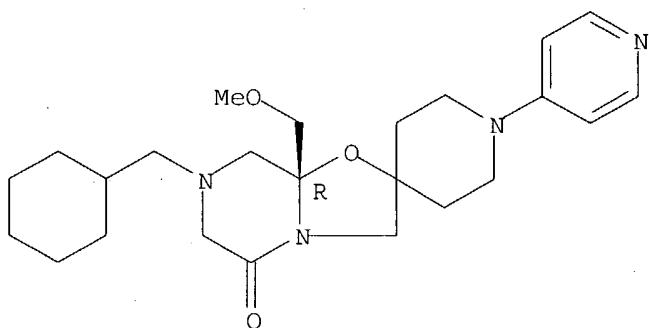
Absolute stereochemistry.



RN 441792-09-2 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
7-(cyclohexylmethyl)tetrahydro-8a-(methoxymethyl)-1'-(4-pyridinyl)-,  
(8aR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

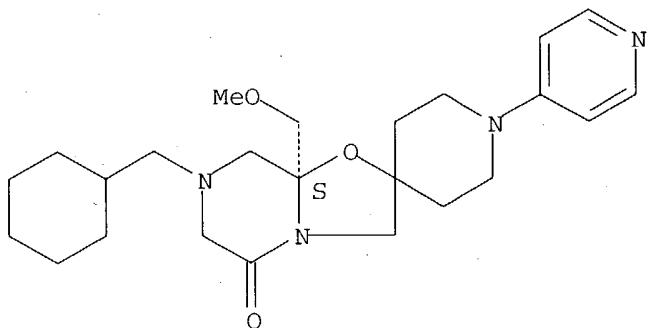


RN 441792-10-5 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,

7-(cyclohexylmethyl)tetrahydro-8a-(methoxymethyl)-1'-(4-pyridinyl)-,  
(8aS)- (9CI) (CA INDEX NAME)

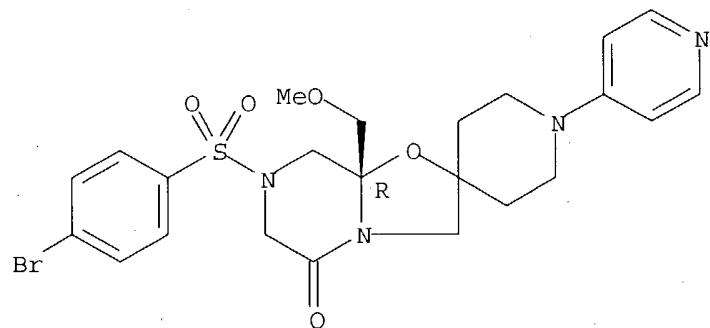
Absolute stereochemistry.



RN 441792-11-6 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
7-[(4-bromophenyl)sulfonyl]tetrahydro-8a-(methoxymethyl)-1'-(4-pyridinyl)-  
, (8aR)- (9CI) (CA INDEX NAME)

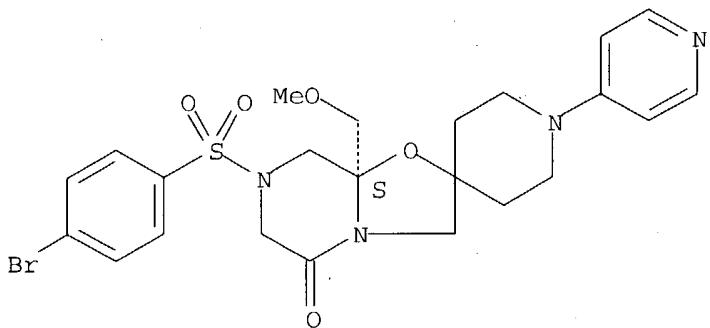
Absolute stereochemistry.



RN 441792-12-7 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
7-[(4-bromophenyl)sulfonyl]tetrahydro-8a-(methoxymethyl)-1'-(4-pyridinyl)-  
, (8aS)- (9CI) (CA INDEX NAME)

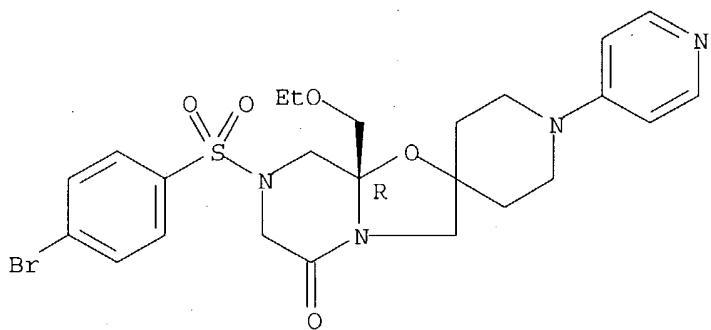
Absolute stereochemistry.



RN 441792-13-8 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
7-[(4-bromophenyl)sulfonyl]-8a-(ethoxymethyl)tetrahydro-1'--(4-pyridinyl)-,  
(8aR)- (9CI) (CA INDEX NAME)

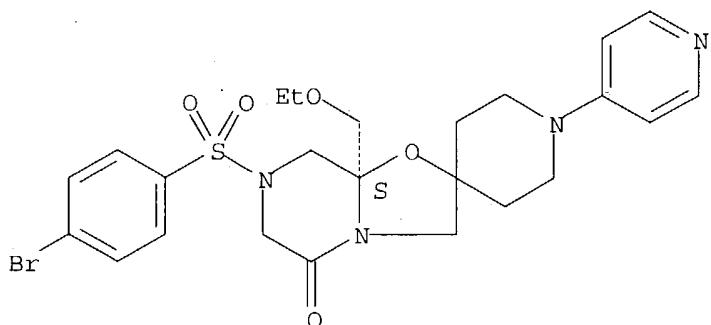
Absolute stereochemistry.



RN 441792-14-9 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
7-[(4-bromophenyl)sulfonyl]-8a-(ethoxymethyl)tetrahydro-1'--(4-pyridinyl)-,  
(8aS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

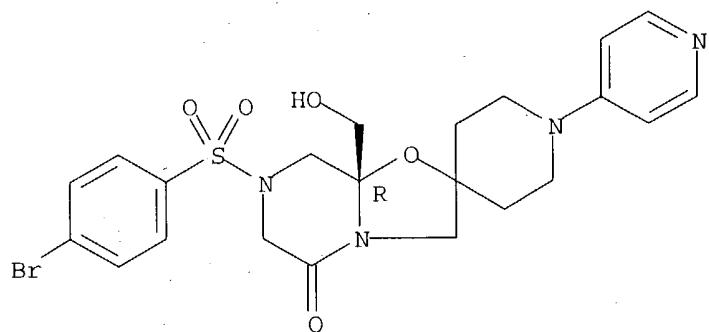


RN 441792-15-0 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,

7-[(4-bromophenyl)sulfonyl]tetrahydro-8a-(hydroxymethyl)-1'-(4-pyridinyl)-  
(8aR) - (9CI) (CA INDEX NAME)

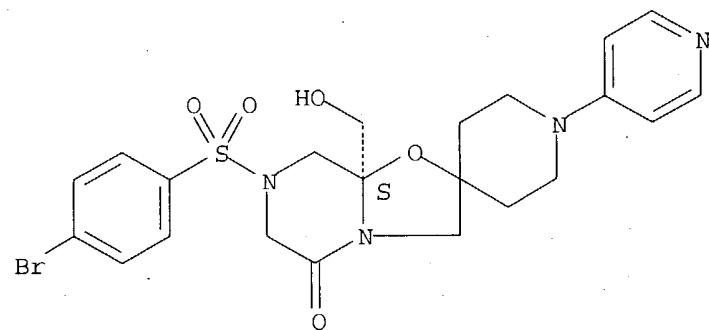
Absolute stereochemistry.



RN 441792-16-1 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
7-[(4-bromophenyl)sulfonyl]tetrahydro-8a-(hydroxymethyl)-1'-(4-pyridinyl)-  
(8aS) - (9CI) (CA INDEX NAME)

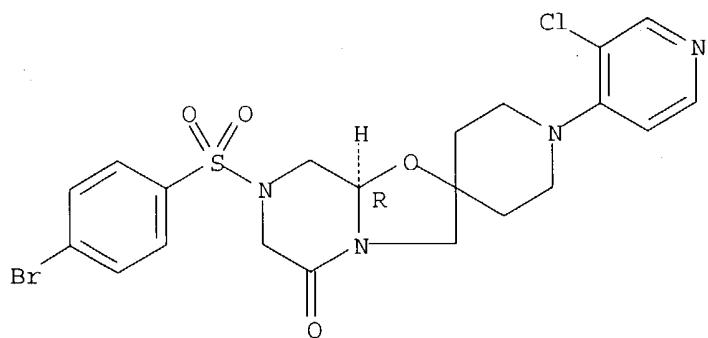
Absolute stereochemistry.



RN 441792-17-2 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
7-[(4-bromophenyl)sulfonyl]-1'-(3-chloro-4-pyridinyl)tetrahydro-, (8aR) -  
(9CI) (CA INDEX NAME)

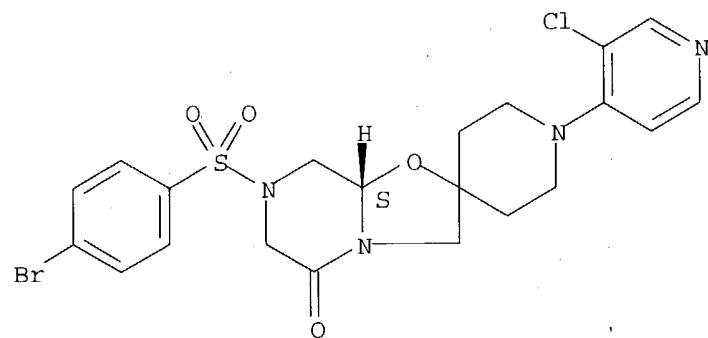
Absolute stereochemistry.



RN 441792-18-3 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
7-[(4-bromophenyl)sulfonyl]-1'-(3-chloro-4-pyridinyl)tetrahydro-, (8aS)-  
(9CI) (CA INDEX NAME)

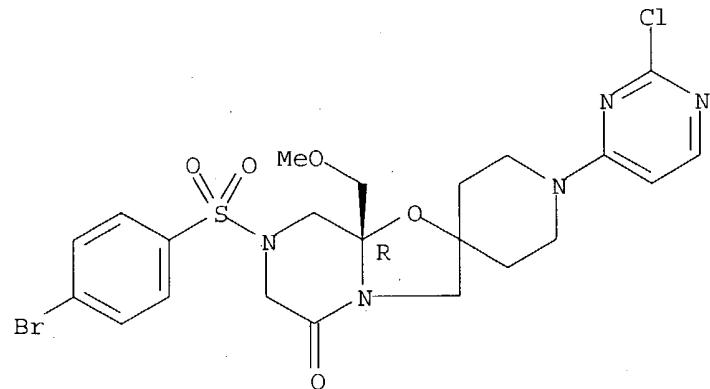
Absolute stereochemistry.



RN 441792-19-4 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
7-[(4-bromophenyl)sulfonyl]-1'-(2-chloro-4-pyrimidinyl)tetrahydro-8a-  
(methoxymethyl)-, (8aR)- (9CI) (CA INDEX NAME)

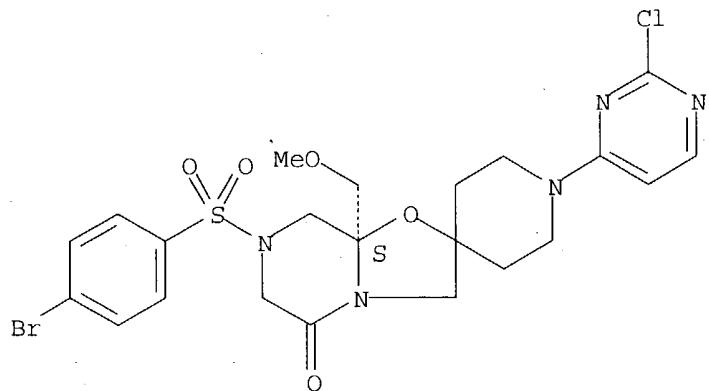
Absolute stereochemistry.



RN 441792-20-7 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
7-[(4-bromophenyl)sulfonyl]-1'-(2-chloro-4-pyrimidinyl)tetrahydro-8a-  
(methoxymethyl)-, (8aS)- (9CI) (CA INDEX NAME)

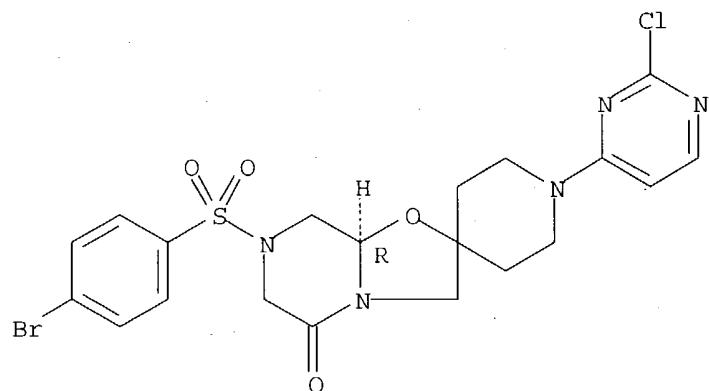
Absolute stereochemistry.



RN 441792-21-8 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
7-[(4-bromophenyl)sulfonyl]-1'-(2-chloro-4-pyrimidinyl)tetrahydro-, (8aR)-  
(9CI) (CA INDEX NAME)

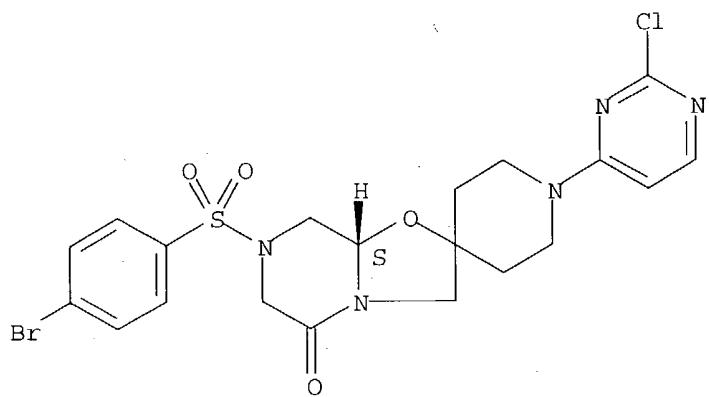
Absolute stereochemistry.



RN 441792-22-9 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
7-[(4-bromophenyl)sulfonyl]-1'-(2-chloro-4-pyrimidinyl)tetrahydro-, (8aS)-  
(9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT    441792-23-0P 441792-24-1P 441792-25-2P  
 441792-26-3P 441792-27-4P 441792-28-5P  
 441792-29-6P 441792-30-9P 441792-33-2P  
 441792-34-3P 441792-35-4P 441792-36-5P  
 441792-37-6P 441792-38-7P 441792-39-8P  
 441792-40-1P 441792-41-2P 441792-42-3P  
 441792-43-4P 441792-44-5P 441792-49-0P  
 441792-50-3P 441792-51-4P 441792-52-5P  
 441792-55-8P 441792-56-9P 441792-59-2P  
 441792-60-5P 441792-61-6P 441792-62-7P  
 441792-63-8P 441792-64-9P 441792-67-2P  
 441792-68-3P 441792-69-4P 441792-70-7P  
 441792-71-8P 441792-72-9P 441792-73-0P  
 441792-74-1P 441792-75-2P 441792-76-3P  
 441792-77-4P 441792-78-5P 441792-79-6P  
 441792-80-9P 441792-81-0P 441792-82-1P  
 441792-83-2P 441792-84-3P 441792-85-4P  
 441792-86-5P 441792-87-6P 441792-88-7P  
 441792-89-8P 441792-90-1P 441792-91-2P  
 441792-92-3P 441792-93-4P 441792-94-5P  
 441792-95-6P 441792-96-7P 441792-97-8P  
 441792-98-9P 441792-99-0P 441793-00-6P  
 441793-03-9P 441793-04-0P 441793-05-1P  
 441793-06-2P 441793-07-3P 441793-08-4P  
 441793-09-5P 441793-10-8P 441793-11-9P  
 441793-12-0P 441793-13-1P 441793-14-2P  
 441793-15-3P 441793-16-4P 441793-17-5P  
 441793-18-6P 441793-19-7P 441793-20-0P  
 441793-21-1P 441793-22-2P 441793-23-3P  
 441793-24-4P 441793-25-5P 441793-26-6P  
 441793-27-7P 441793-28-8P 441793-29-9P  
 441793-30-2P 441793-31-3P 441793-32-4P  
 441793-33-5P 441793-34-6P 441793-35-7P  
 441793-36-8P 441793-37-9P 441793-38-0P  
 441793-39-1P 441793-40-4P 441793-41-5P  
**441793-42-6P**

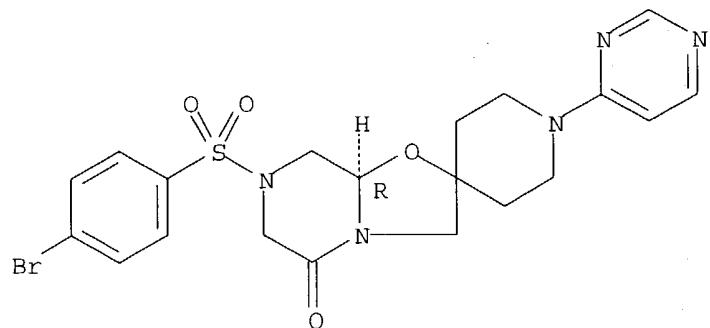
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of tricyclic spiro compds. as oxidosqualene cyclase inhibitors and cholesterol biosynthesis inhibitors for preventives and therapeutic agents)

RN 441792-23-0 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
7-[(4-bromophenyl)sulfonyl]tetrahydro-1'-(4-pyrimidinyl)-, (8aR)- (9CI)  
(CA INDEX NAME)

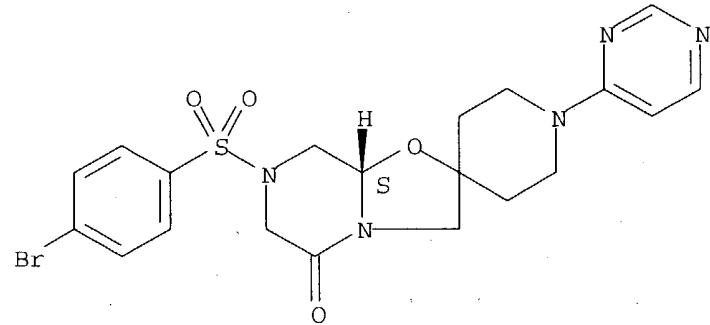
Absolute stereochemistry.



RN 441792-24-1 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
7-[(4-bromophenyl)sulfonyl]tetrahydro-1'-(4-pyrimidinyl)-, (8aS)- (9CI)  
(CA INDEX NAME)

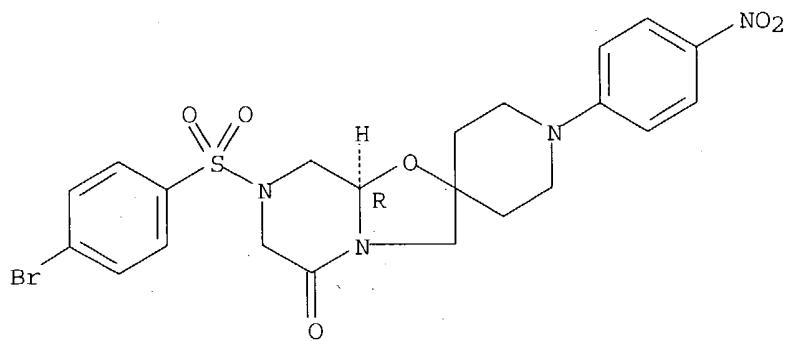
Absolute stereochemistry.



RN 441792-25-2 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
7-[(4-bromophenyl)sulfonyl]tetrahydro-1'-(4-nitrophenyl)-, (8aR)- (9CI)  
(CA INDEX NAME)

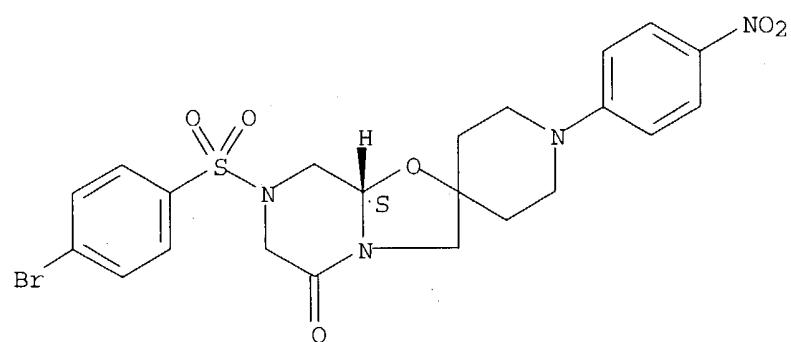
Absolute stereochemistry.



RN 441792-26-3 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
7-[(4-bromophenyl)sulfonyl]tetrahydro-1H-(4-nitrophenyl)-, (8aS)- (9CI)  
(CA INDEX NAME)

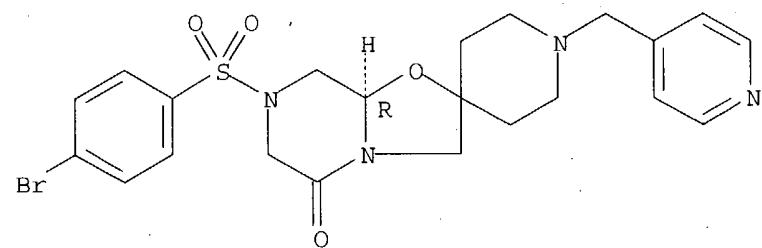
Absolute stereochemistry.



RN 441792-27-4 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
7-[(4-bromophenyl)sulfonyl]tetrahydro-1H-(4-pyridinylmethyl)-, (8aR)-  
(9CI) (CA INDEX NAME)

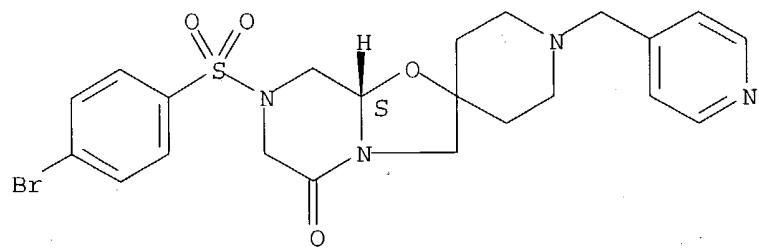
Absolute stereochemistry.



RN 441792-28-5 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
7-[(4-bromophenyl)sulfonyl]tetrahydro-1H-(4-pyridinylmethyl)-, (8aS)-  
(9CI) (CA INDEX NAME)

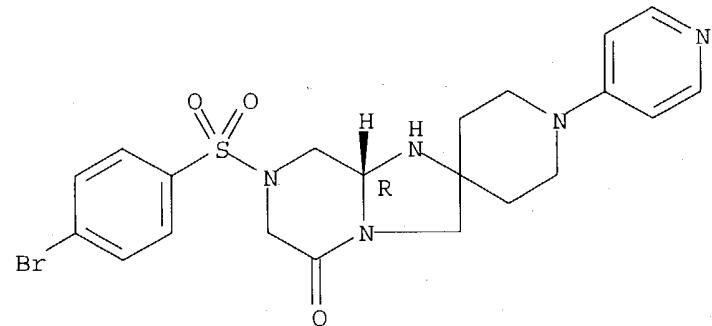
Absolute stereochemistry.



RN 441792-29-6 CAPLUS

CN Spiro[imidazo[1,2-a]pyrazine-2(3H),4'-piperidin]-5(1H)-one,  
7-[(4-bromophenyl)sulfonyl]tetrahydro-1'-(4-pyridinyl)-, (8aR)- (9CI) (CA  
INDEX NAME)

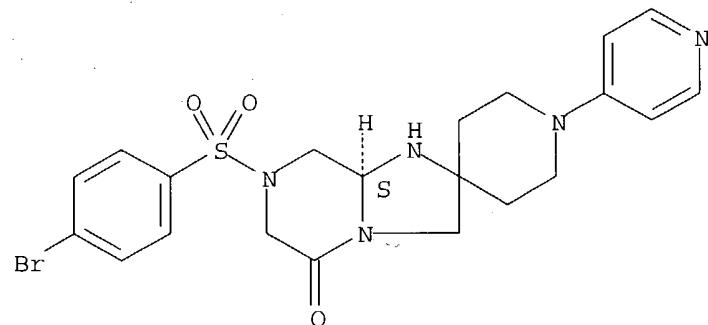
Absolute stereochemistry.



RN 441792-30-9 CAPLUS

CN Spiro[imidazo[1,2-a]pyrazine-2(3H),4'-piperidin]-5(1H)-one,  
7-[(4-bromophenyl)sulfonyl]tetrahydro-1'-(4-pyridinyl)-, (8aS)- (9CI) (CA  
INDEX NAME)

Absolute stereochemistry.

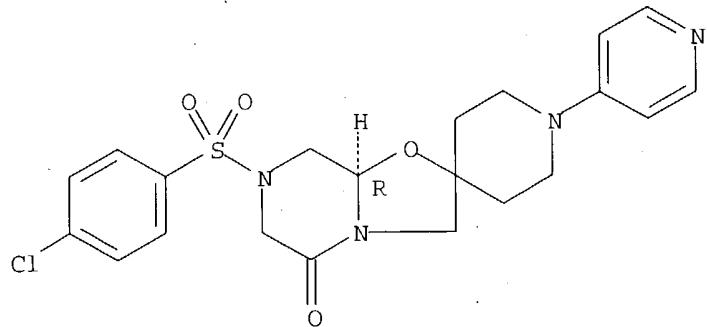


RN 441792-33-2 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5(1H)-one,  
7-[(4-chlorophenyl)sulfonyl]tetrahydro-1'-(4-pyridinyl)-, (8aR)- (9CI)

(CA INDEX NAME)

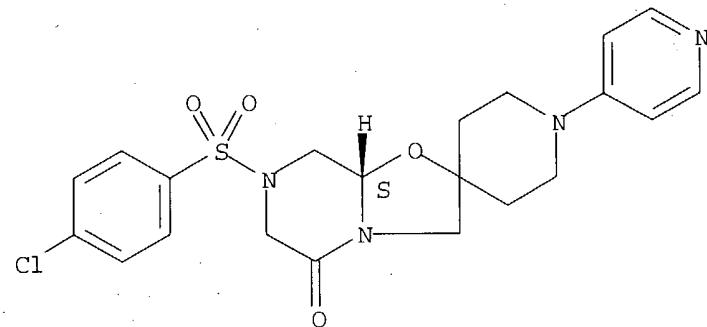
Absolute stereochemistry.



RN 441792-34-3 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
7-[(4-chlorophenyl)sulfonyl]tetrahydro-1'-(4-pyridinyl)-, (8aS)- (9CI)  
(CA INDEX NAME)

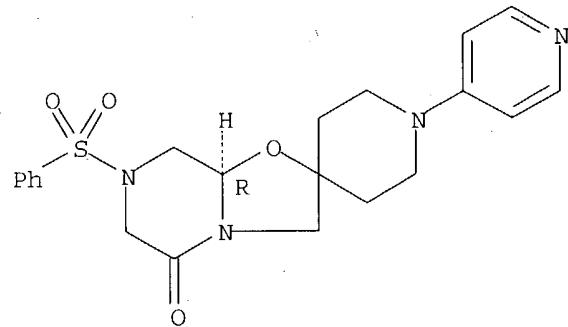
Absolute stereochemistry.



RN 441792-35-4 CAPLUS

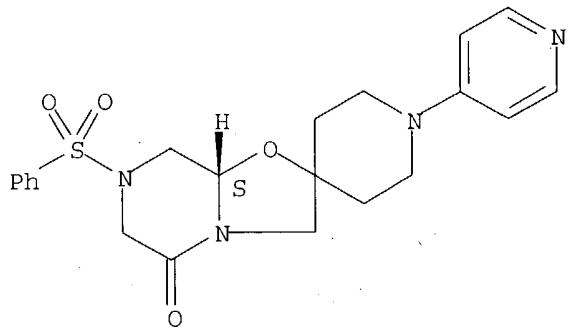
CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
tetrahydro-7-(phenylsulfonyl)-1'-(4-pyridinyl)-, (8aR)- (9CI) (CA INDEX  
NAME)

Absolute stereochemistry.



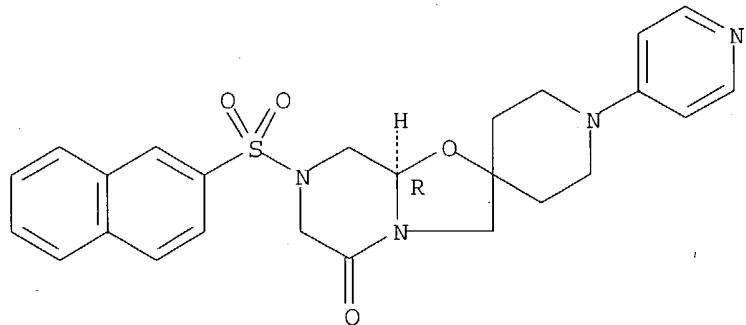
RN 441792-36-5 CAPLUS  
 CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
 tetrahydro-7-(phenylsulfonyl)-1'-(4-pyridinyl)-, (8aS)- (9CI) (CA INDEX  
 NAME)

Absolute stereochemistry.



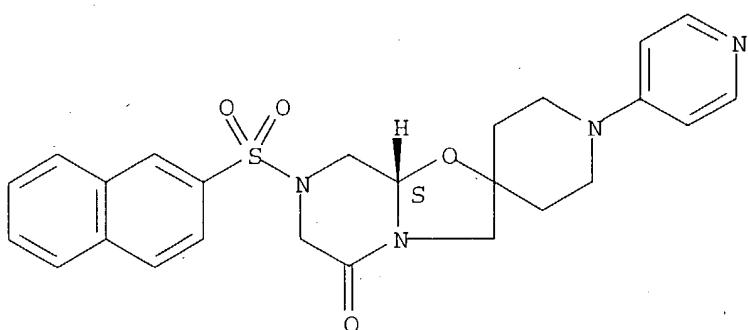
RN 441792-37-6 CAPLUS  
 CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
 tetrahydro-7-(2-naphthalenylsulfonyl)-1'-(4-pyridinyl)-, (8aR)- (9CI) (CA  
 INDEX NAME)

Absolute stereochemistry.



RN 441792-38-7 CAPLUS  
 CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
 tetrahydro-7-(2-naphthalenylsulfonyl)-1'-(4-pyridinyl)-, (8aS)- (9CI) (CA  
 INDEX NAME)

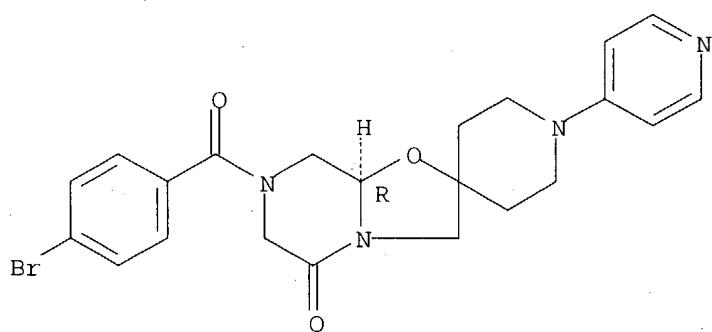
Absolute stereochemistry.



RN 441792-39-8 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
7-(4-bromobenzoyl)tetrahydro-1'-(4-pyridinyl)-, (8aR)- (9CI) (CA INDEX  
NAME)

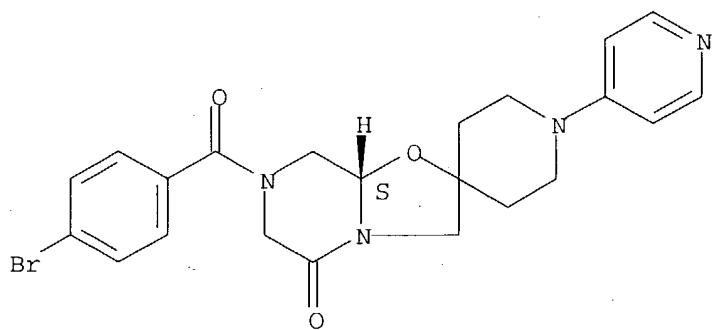
Absolute stereochemistry.



RN 441792-40-1 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
7-(4-bromobenzoyl)tetrahydro-1'-(4-pyridinyl)-, (8aS)- (9CI) (CA INDEX  
NAME)

Absolute stereochemistry.

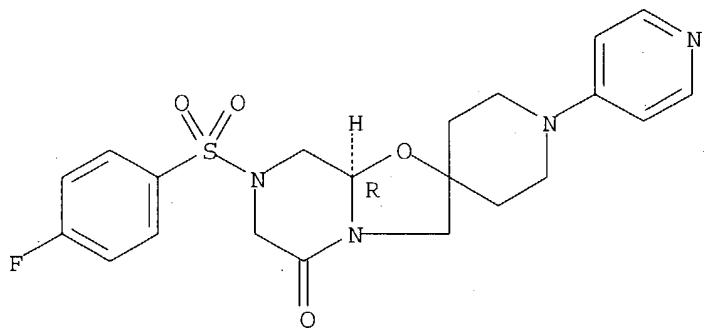


RN 441792-41-2 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,

7-[(4-fluorophenyl)sulfonyl]tetrahydro-1'-(4-pyridinyl)-, (8aR)- (9CI)  
 (CA INDEX NAME)

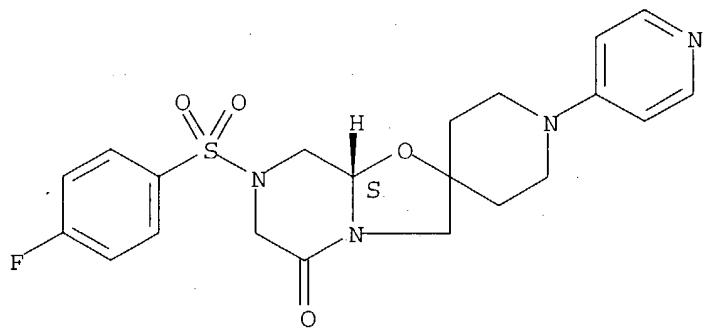
Absolute stereochemistry.



RN 441792-42-3 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
 7-[(4-fluorophenyl)sulfonyl]tetrahydro-1'-(4-pyridinyl)-, (8aS)- (9CI).  
 (CA INDEX NAME)

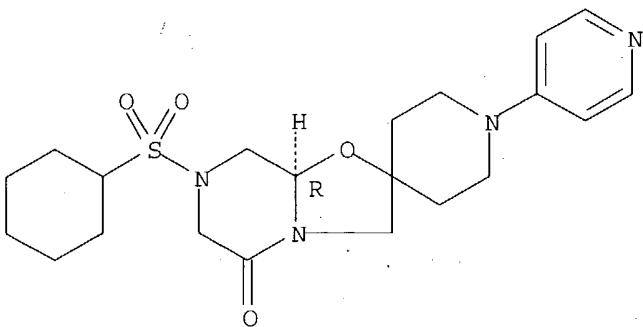
Absolute stereochemistry.



RN 441792-43-4 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
 7-(cyclohexylsulfonyl)tetrahydro-1'-(4-pyridinyl)-, (8aR)- (9CI) (CA  
 INDEX NAME)

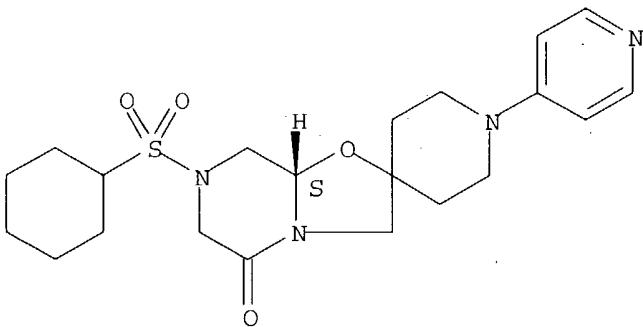
Absolute stereochemistry.



RN 441792-44-5 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
7-(cyclohexylsulfonyl)tetrahydro-1'-(4-pyridinyl)-, (8aS)- (9CI) (CA  
INDEX NAME)

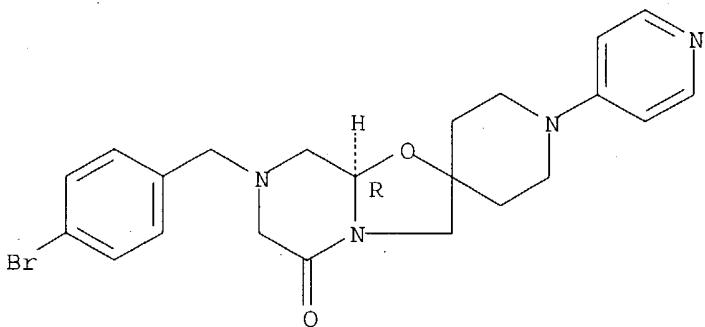
Absolute stereochemistry.



RN 441792-49-0 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
7-[(4-bromophenyl)methyl]tetrahydro-1'-(4-pyridinyl)-, (8aR)- (9CI) (CA  
INDEX NAME)

Absolute stereochemistry.

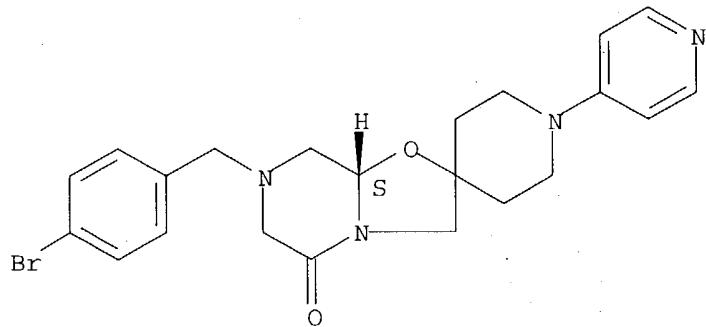


RN 441792-50-3 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,

7-[(4-bromophenyl)methyl]tetrahydro-1'-(4-pyridinyl)-, (8aS)- (9CI) (CA INDEX NAME)

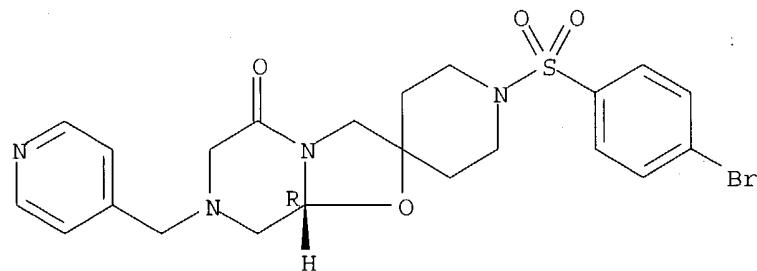
Absolute stereochemistry.



RN 441792-51-4 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
1'-'-[(4-bromophenyl)sulfonyl]tetrahydro-7-(4-pyridinylmethyl)-, (8aR)-  
(9CI) (CA INDEX NAME)

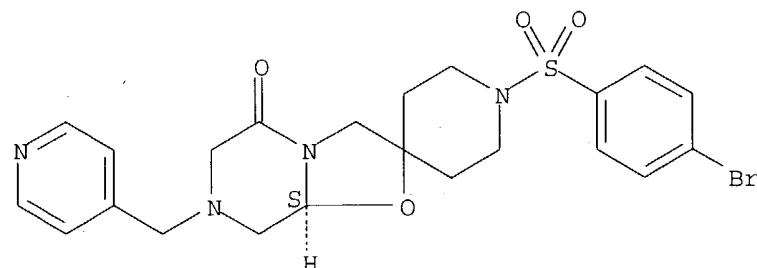
Absolute stereochemistry.



RN 441792-52-5 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
1'-'-[(4-bromophenyl)sulfonyl]tetrahydro-7-(4-pyridinylmethyl)-, (8aS)-  
(9CI) (CA INDEX NAME)

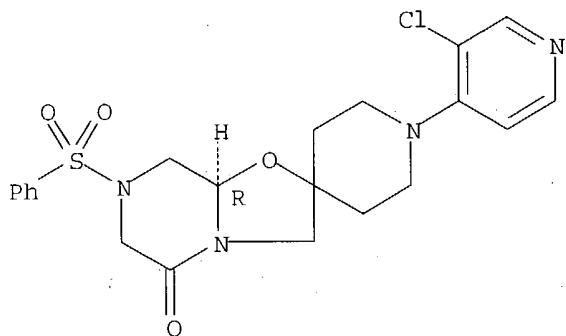
Absolute stereochemistry.



RN 441792-55-8 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
 1'-(3-chloro-4-pyridinyl)tetrahydro-7-(phenylsulfonyl)-, (8aR)- (9CI) (CA  
 INDEX NAME)

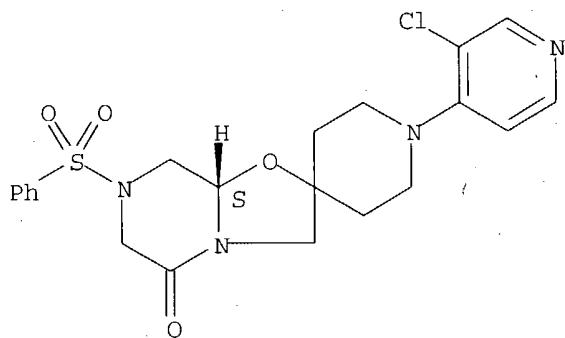
Absolute stereochemistry.



RN 441792-56-9 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
 1'-(3-chloro-4-pyridinyl)tetrahydro-7-(phenylsulfonyl)-, (8aS)- (9CI) (CA  
 INDEX NAME)

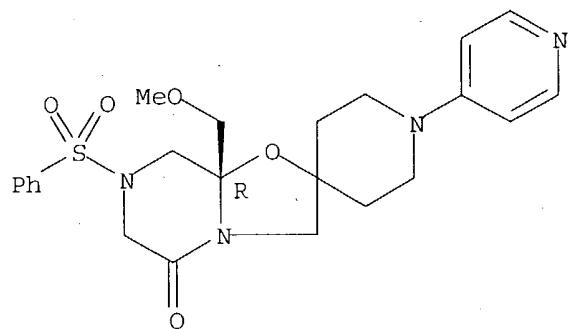
Absolute stereochemistry.



RN 441792-59-2 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
 tetrahydro-8a-(methoxymethyl)-7-(phenylsulfonyl)-1'-(4-pyridinyl)-, (8aR)-  
 (9CI) (CA INDEX NAME)

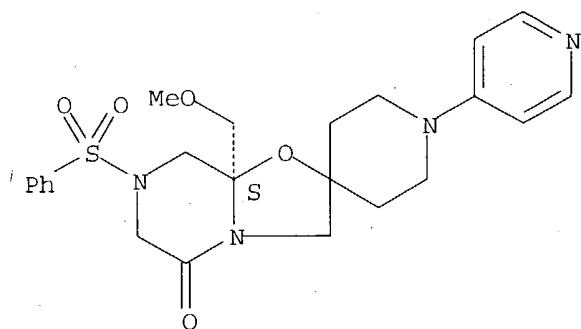
Absolute stereochemistry.



RN 441792-60-5 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one, tetrahydro-8a-(methoxymethyl)-7-(phenylsulfonyl)-1'-(4-pyridinyl)-, (8aS)-(9CI) (CA INDEX NAME)

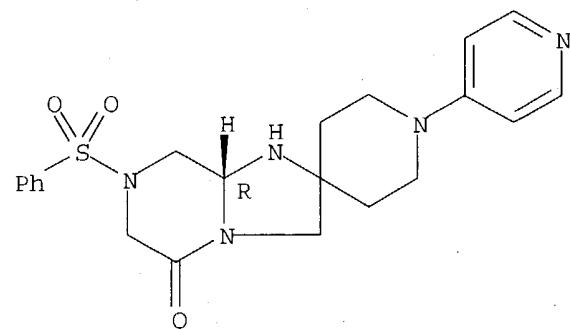
Absolute stereochemistry.



RN 441792-61-6 CAPLUS

CN Spiro[imidazo[1,2-a]pyrazine-2(3H),4'-piperidin]-5(1H)-one, tetrahydro-7-(phenylsulfonyl)-1'-(4-pyridinyl)-, (8aR)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

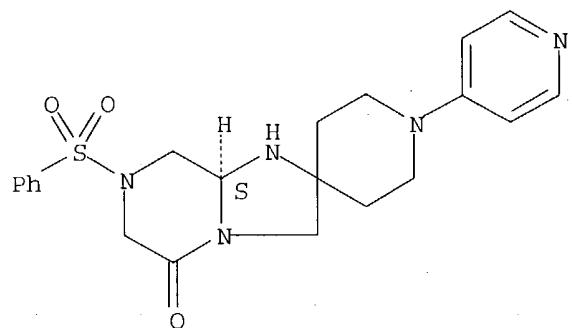


RN 441792-62-7 CAPLUS

CN Spiro[imidazo[1,2-a]pyrazine-2(3H),4'-piperidin]-5(1H)-one,

tetrahydro-7-(phenylsulfonyl)-1'-(4-pyridinyl)-, (8aS)- (9CI) (CA INDEX NAME)

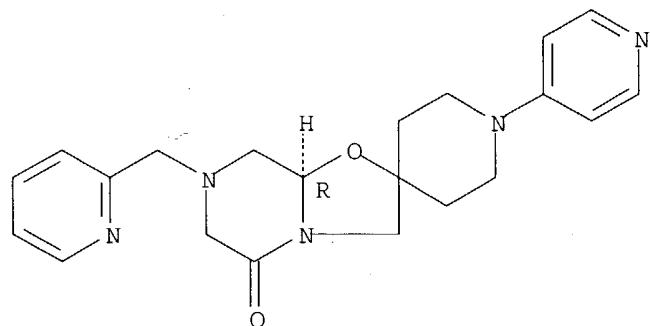
Absolute stereochemistry.



RN 441792-63-8 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one, tetrahydro-1'-(4-pyridinyl)-7-(2-pyridinylmethyl)-, (8aR)- (9CI) (CA INDEX NAME)

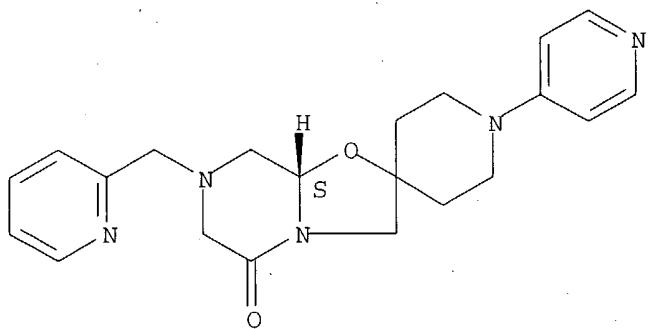
Absolute stereochemistry.



RN 441792-64-9 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one, tetrahydro-1'-(4-pyridinyl)-7-(2-pyridinylmethyl)-, (8aS)- (9CI) (CA INDEX NAME)

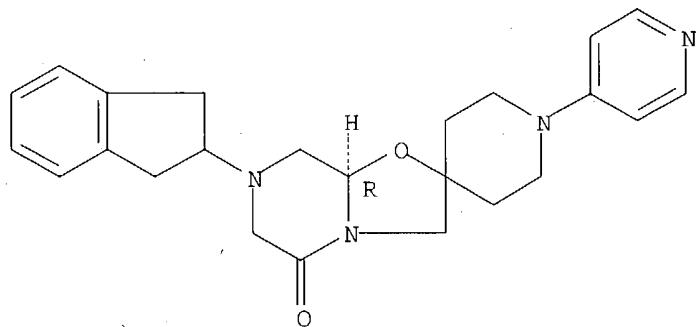
Absolute stereochemistry.



RN 441792-67-2 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
7-(2,3-dihydro-1H-inden-2-yl)tetrahydro-1'-(4-pyridinyl)-, (8aR)- (9CI)  
(CA INDEX NAME)

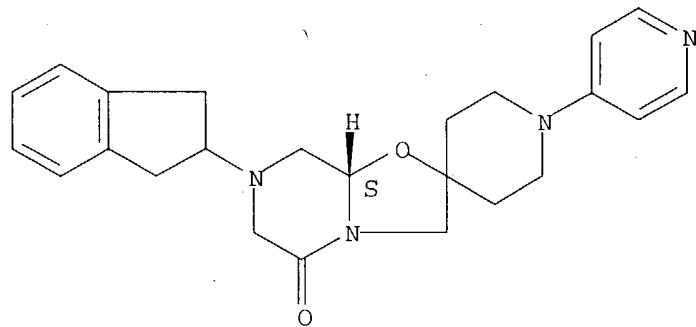
Absolute stereochemistry.



RN 441792-68-3 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
7-(2,3-dihydro-1H-inden-2-yl)tetrahydro-1'-(4-pyridinyl)-, (8aS)- (9CI)  
(CA INDEX NAME)

Absolute stereochemistry.

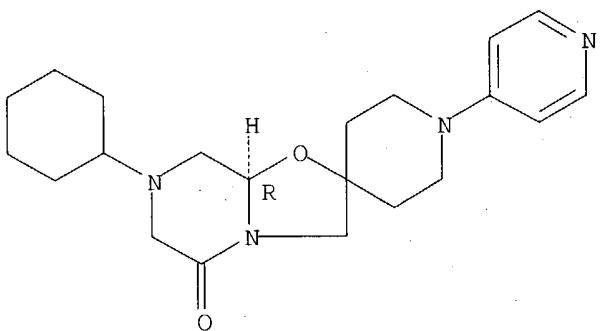


RN 441792-69-4 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,

7-cyclohexyltetrahydro-1'-(4-pyridinyl)-, (8aR)- (9CI) (CA INDEX NAME)

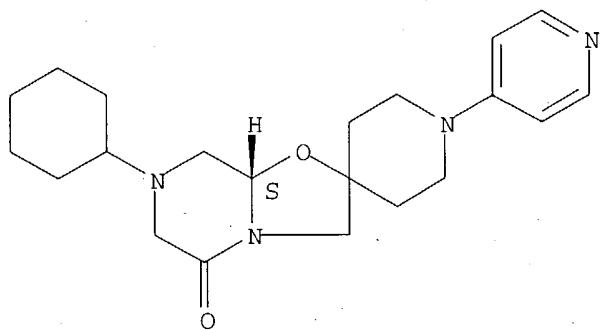
Absolute stereochemistry.



RN 441792-70-7 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
7-cyclohexyltetrahydro-1'-(4-pyridinyl)-, (8aS)- (9CI) (CA INDEX NAME)

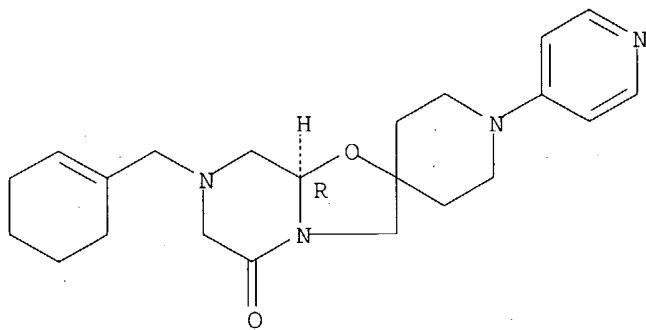
Absolute stereochemistry.



RN 441792-71-8 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
7-(1-cyclohexen-1-ylmethyl)tetrahydro-1'-(4-pyridinyl)-, (8aR)- (9CI) (CA  
INDEX NAME)

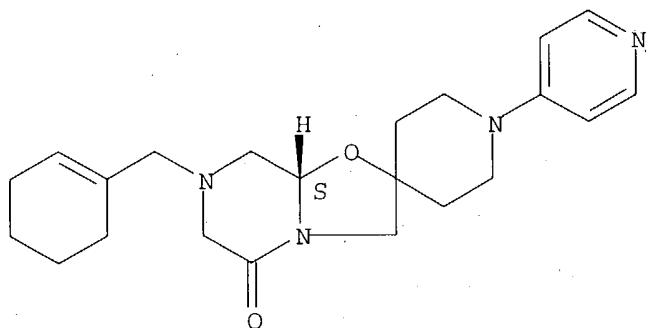
Absolute stereochemistry.



RN 441792-72-9 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
7-(1-cyclohexen-1-ylmethyl)tetrahydro-1'-(4-pyridinyl)-, (8aS)- (9CI) (CA  
INDEX NAME)

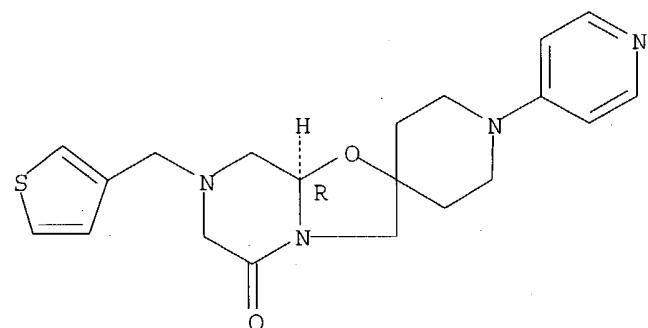
Absolute stereochemistry.



RN 441792-73-0 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
tetrahydro-1'-(4-pyridinyl)-7-(3-thienylmethyl)-, (8aR)- (9CI) (CA INDEX  
NAME)

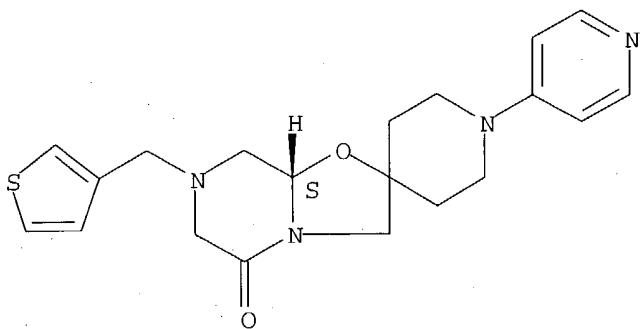
Absolute stereochemistry.



RN 441792-74-1 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
tetrahydro-1'-(4-pyridinyl)-7-(3-thienylmethyl)-, (8aS)- (9CI) (CA INDEX  
NAME)

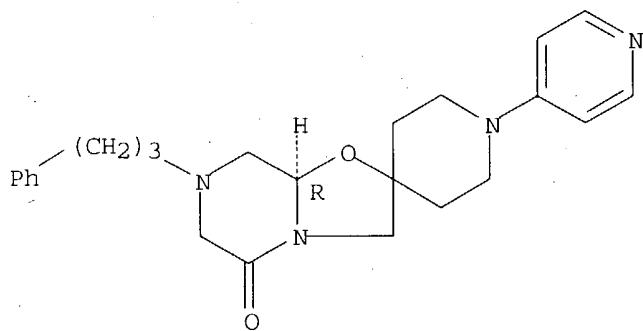
Absolute stereochemistry.



RN 441792-75-2 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
tetrahydro-7-(3-phenylpropyl)-1'-(4-pyridinyl)-, (8aR)- (9CI) (CA INDEX  
NAME)

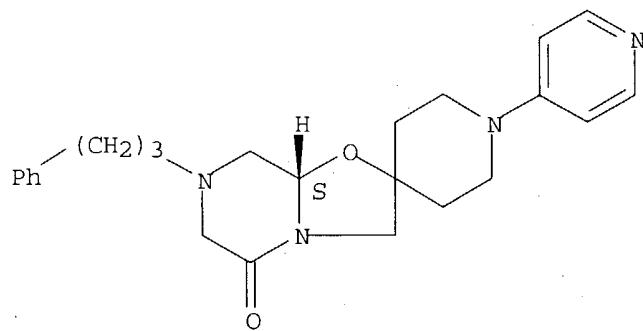
Absolute stereochemistry.



RN 441792-76-3 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
tetrahydro-7-(3-phenylpropyl)-1'-(4-pyridinyl)-, (8aS)- (9CI) (CA INDEX  
NAME)

Absolute stereochemistry.

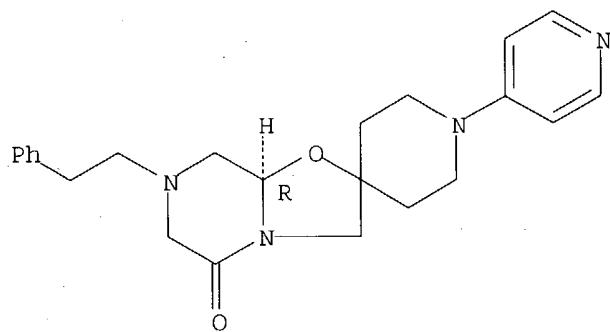


RN 441792-77-4 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,

tetrahydro-7-(2-phenylethyl)-1'-(4-pyridinyl)-, (8aR)- (9CI) (CA INDEX NAME)

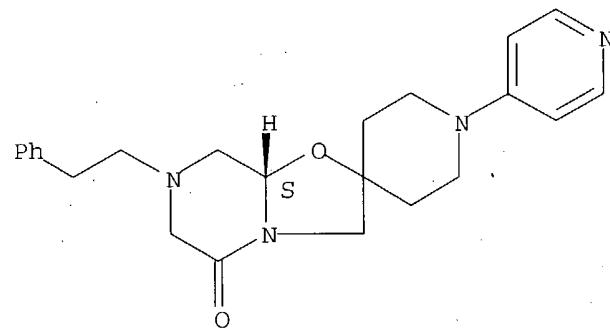
Absolute stereochemistry.



RN 441792-78-5 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
tetrahydro-7-(2-phenylethyl)-1'-(4-pyridinyl)-, (8aS)- (9CI) (CA INDEX NAME)

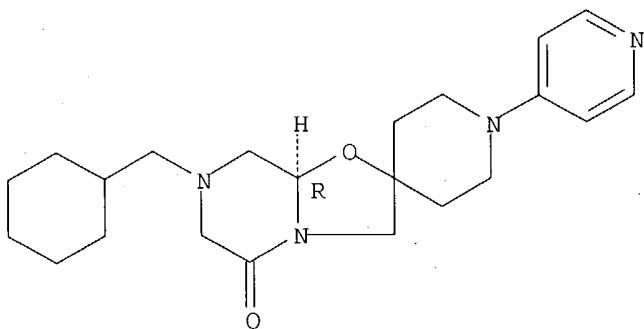
Absolute stereochemistry.



RN 441792-79-6 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
7-(cyclohexylmethyl)tetrahydro-1'-(4-pyridinyl)-, (8aR)- (9CI) (CA INDEX NAME)

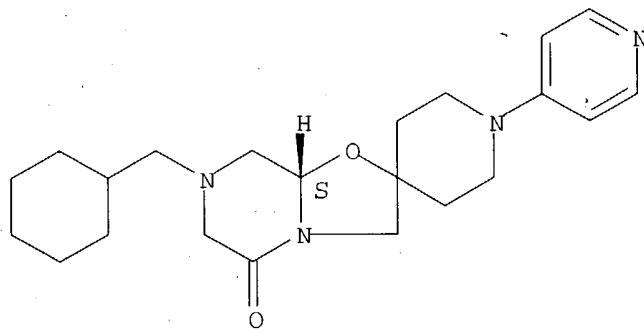
Absolute stereochemistry.



RN 441792-80-9 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
7-(cyclohexylmethyl)tetrahydro-1H-1-(4-pyridinyl)-, (8aS)- (9CI) (CA INDEX  
NAME)

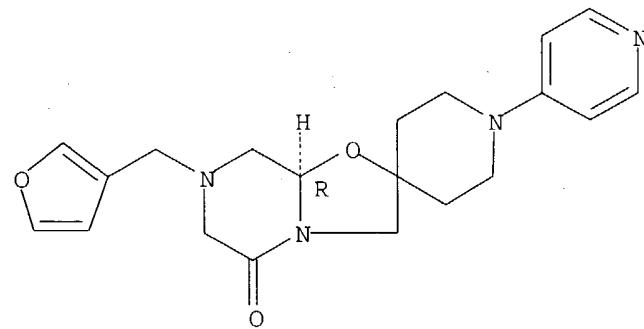
Absolute stereochemistry.



RN 441792-81-0 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
7-(3-furanyl methyl)tetrahydro-1H-1-(4-pyridinyl)-, (8aR)- (9CI) (CA INDEX  
NAME)

Absolute stereochemistry.

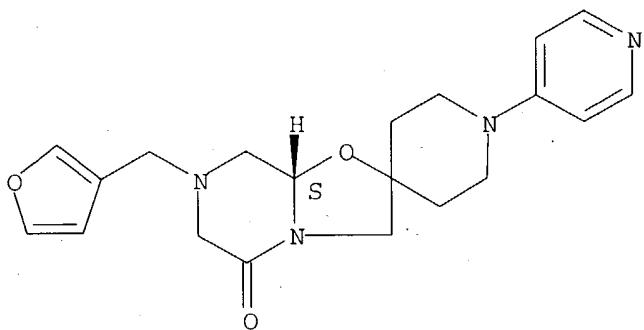


RN 441792-82-1 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,

7-(3-furanyl methyl)tetrahydro-1'-(4-pyridinyl)-, (8aS)- (9CI) (CA INDEX NAME)

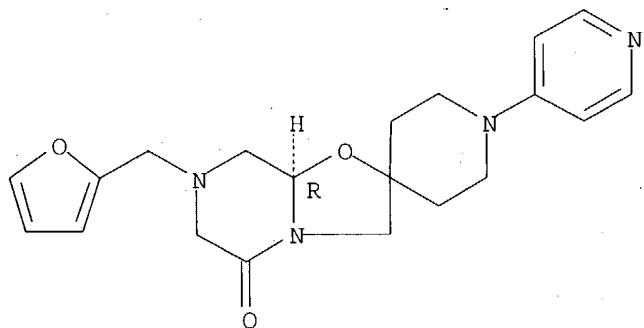
Absolute stereochemistry.



RN 441792-83-2 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
7-(2-furanyl methyl)tetrahydro-1'-(4-pyridinyl)-, (8aR)- (9CI) (CA INDEX NAME)

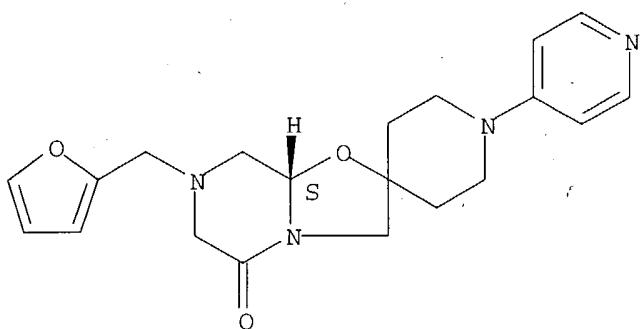
Absolute stereochemistry.



RN 441792-84-3 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
7-(2-furanyl methyl)tetrahydro-1'-(4-pyridinyl)-, (8aS)- (9CI) (CA INDEX NAME)

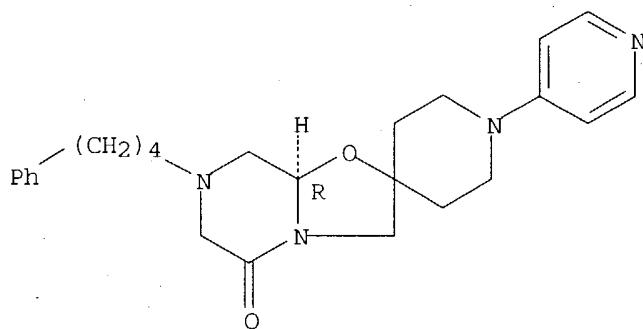
Absolute stereochemistry.



RN 441792-85-4 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
tetrahydro-7-(4-phenylbutyl)-1'-(4-pyridinyl)-, (8aR)- (9CI) (CA INDEX  
NAME)

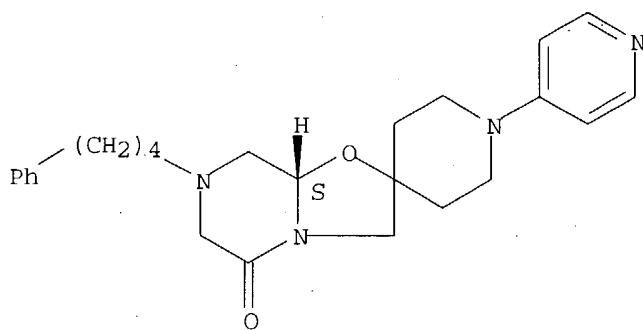
Absolute stereochemistry.



RN 441792-86-5 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
tetrahydro-7-(4-phenylbutyl)-1'-(4-pyridinyl)-, (8aS)- (9CI) (CA INDEX  
NAME)

Absolute stereochemistry.

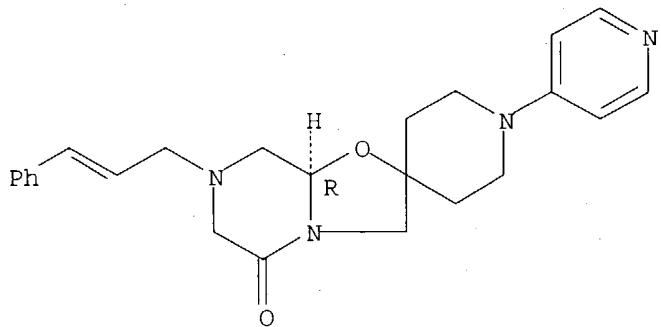


RN 441792-87-6 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,

tetrahydro-7-(3-phenyl-2-propenyl)-1'-(4-pyridinyl)-, (8aR)- (9CI) (CA INDEX NAME)

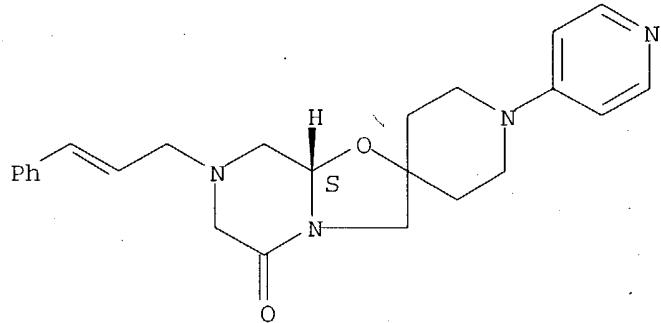
Absolute stereochemistry.  
Double bond geometry unknown.



RN 441792-88-7 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
tetrahydro-7-(3-phenyl-2-propenyl)-1'-(4-pyridinyl)-, (8aS)- (9CI) (CA INDEX NAME)

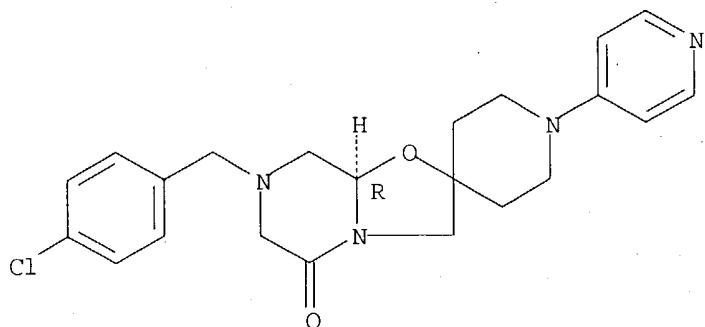
Absolute stereochemistry.  
Double bond geometry unknown.



RN 441792-89-8 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
7-[(4-chlorophenyl)methyl]tetrahydro-1'-(4-pyridinyl)-, (8aR)- (9CI) (CA INDEX NAME)

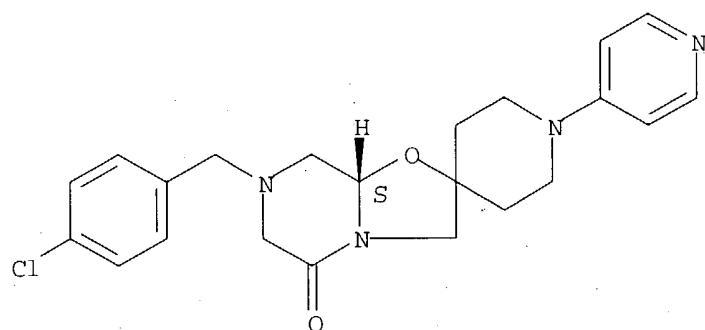
Absolute stereochemistry.



RN 441792-90-1 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
7-[(4-chlorophenyl)methyl]tetrahydro-1'-(4-pyridinyl)-, (8aS)- (9CI) (CA  
INDEX NAME)

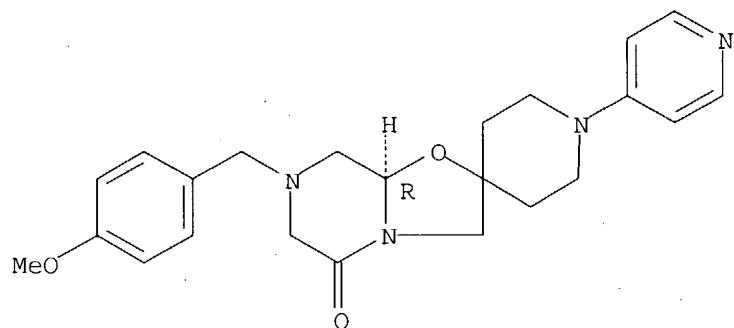
Absolute stereochemistry.



RN 441792-91-2 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
tetrahydro-7-[(4-methoxyphenyl)methyl]-1'-(4-pyridinyl)-, (8aR)- (9CI)  
(CA INDEX NAME)

Absolute stereochemistry.

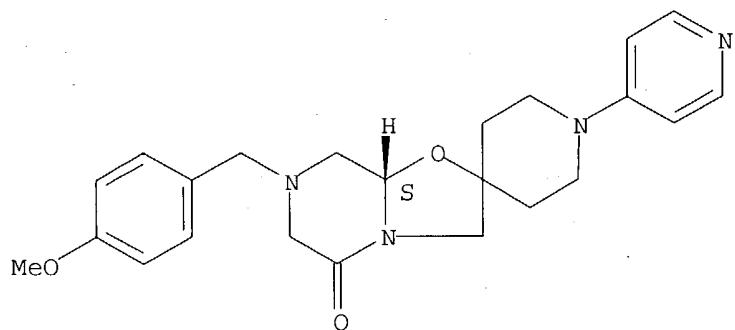


RN 441792-92-3 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,

tetrahydro-7-[(4-methoxyphenyl)methyl]-1'-(4-pyridinyl)-, (8aS)- (9CI)  
 (CA INDEX NAME)

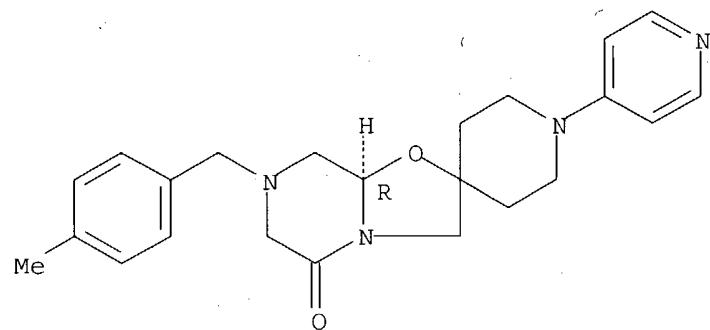
Absolute stereochemistry.



RN 441792-93-4 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
 tetrahydro-7-[(4-methoxyphenyl)methyl]-1'-(4-pyridinyl)-, (8aR)- (9CI) (CA  
 INDEX NAME)

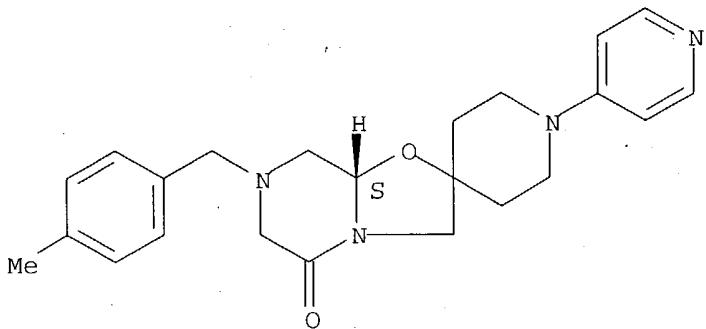
Absolute stereochemistry.



RN 441792-94-5 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
 tetrahydro-7-[(4-methoxyphenyl)methyl]-1'-(4-pyridinyl)-, (8aS)- (9CI) (CA  
 INDEX NAME)

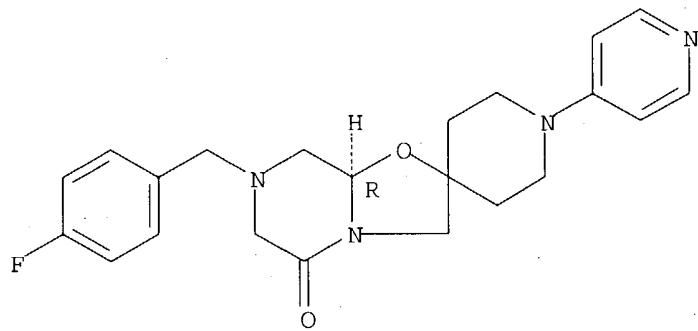
Absolute stereochemistry.



RN 441792-95-6 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
7-[(4-fluorophenyl)methyl]tetrahydro-1'-(4-pyridinyl)-, (8aR)- (9CI) (CA  
INDEX NAME)

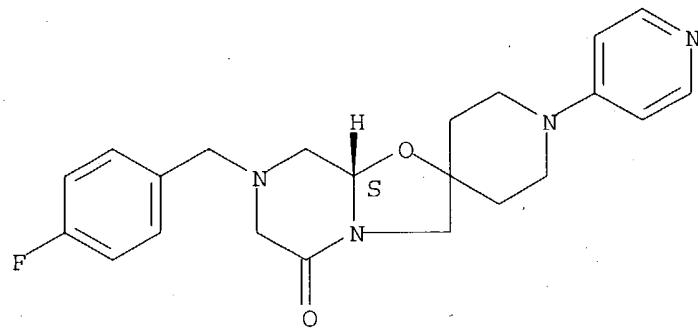
Absolute stereochemistry.



RN 441792-96-7 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
7-[(4-fluorophenyl)methyl]tetrahydro-1'-(4-pyridinyl)-, (8aS)- (9CI) (CA  
INDEX NAME)

Absolute stereochemistry.

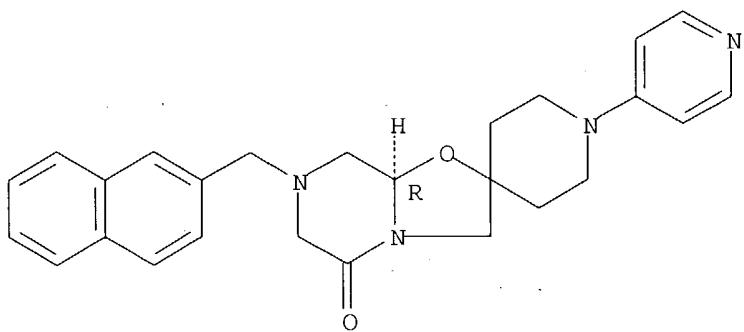


RN 441792-97-8 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,

tetrahydro-7-(2-naphthalenylmethyl)-1'-(4-pyridinyl)-, (8aR)- (9CI) (CA INDEX NAME)

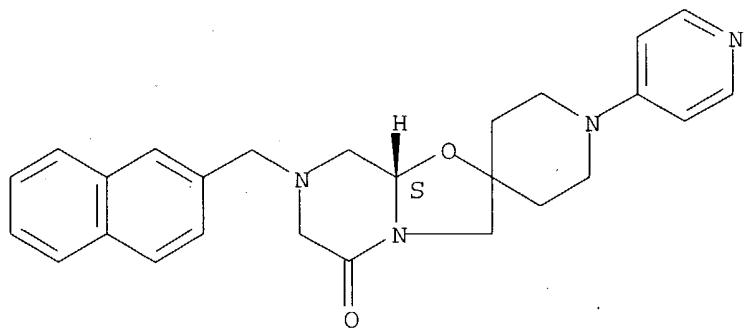
Absolute stereochemistry.



RN 441792-98-9 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one, tetrahydro-7-(2-naphthalenylmethyl)-1'-(4-pyridinyl)-, (8aS)- (9CI) (CA INDEX NAME)

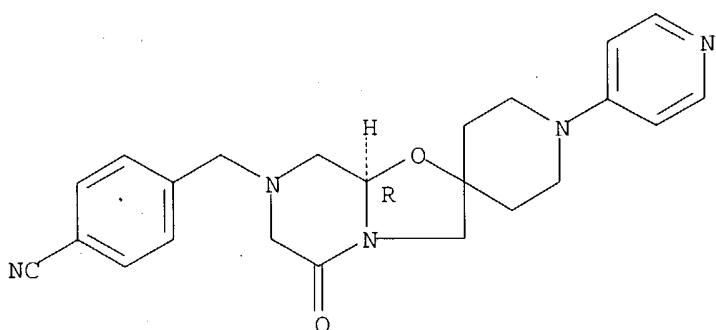
Absolute stereochemistry.



RN 441792-99-0 CAPLUS

CN Benzonitrile, 4-[(8aR)-tetrahydro-5-oxo-1'-(4-pyridinyl)spiro[7H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-7-yl]methyl]- (9CI) (CA INDEX NAME)

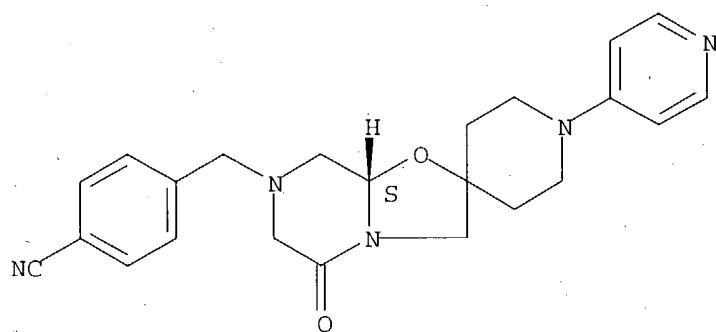
Absolute stereochemistry.



RN 441793-00-6 CAPLUS

CN Benzonitrile, 4-[[[8aS]-tetrahydro-5-oxo-1'-(4-pyridinyl)spiro[7H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-7-yl]methyl]- (9CI) (CA INDEX NAME)

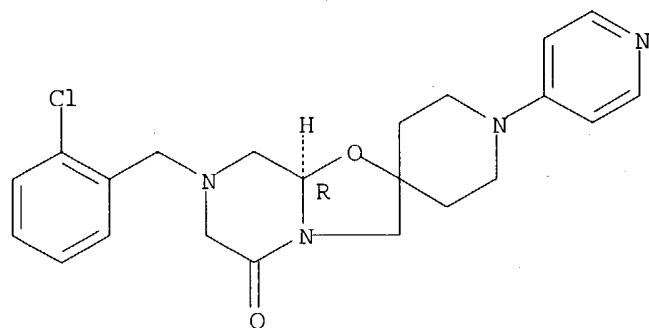
Absolute stereochemistry.



RN 441793-03-9 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one, 7-[(2-chlorophenyl)methyl]tetrahydro-1'-(4-pyridinyl)-, (8aR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

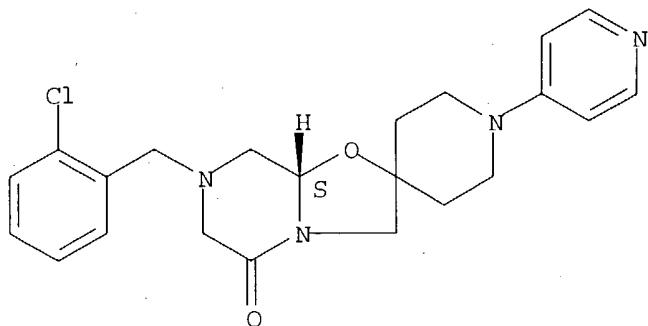


RN 441793-04-0 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,

7-[(2-chlorophenyl)methyl]tetrahydro-1'-(4-pyridinyl)-, (8aS)- (9CI) (CA INDEX NAME)

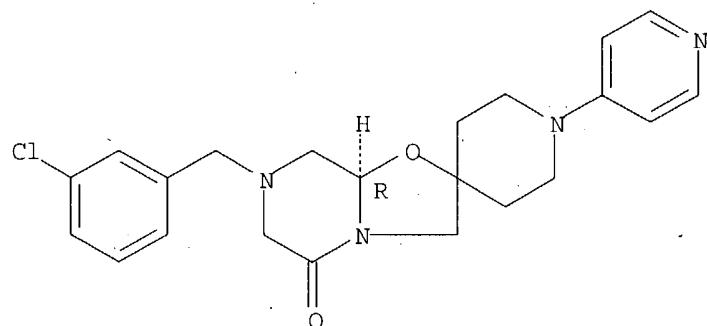
Absolute stereochemistry.



RN 441793-05-1 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
7-[(3-chlorophenyl)methyl]tetrahydro-1'-(4-pyridinyl)-, (8aR)- (9CI) (CA INDEX NAME)

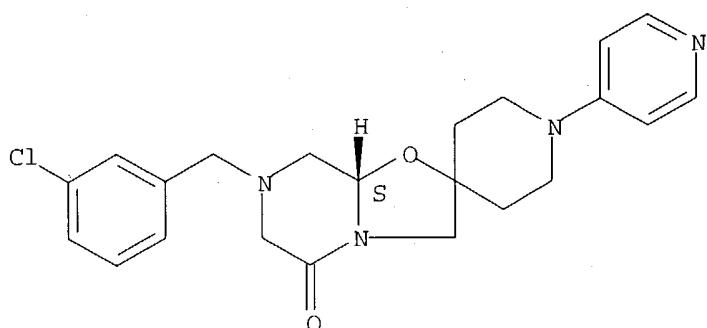
Absolute stereochemistry.



RN 441793-06-2 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
7-[(3-chlorophenyl)methyl]tetrahydro-1'-(4-pyridinyl)-, (8aS)- (9CI) (CA INDEX NAME)

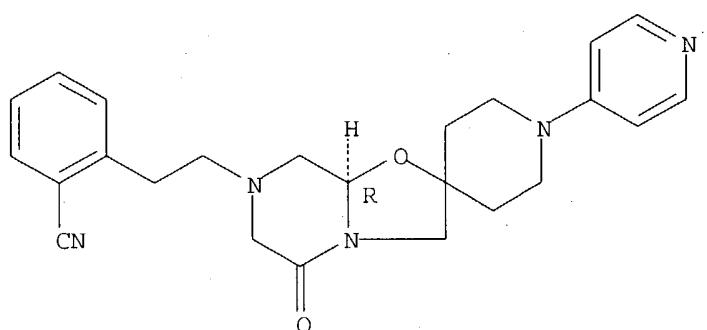
Absolute stereochemistry.



RN 441793-07-3 CAPLUS

CN Benzonitrile, 2-[2-[(8aR)-tetrahydro-5-oxo-1'-(4-pyridinyl)spiro[7H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-7-yl]ethyl]- (9CI) (CA INDEX NAME)

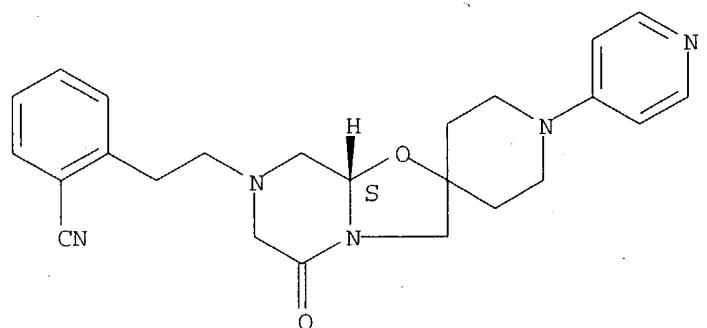
Absolute stereochemistry.



RN 441793-08-4 CAPLUS

CN Benzonitrile, 2-[2-[(8aS)-tetrahydro-5-oxo-1'-(4-pyridinyl)spiro[7H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-7-yl]ethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

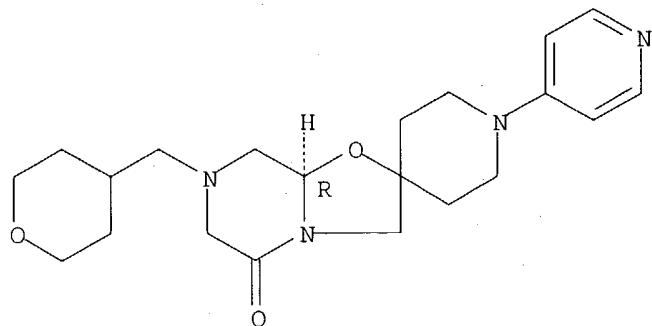


RN 441793-09-5 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,

tetrahydro-1'-(4-pyridinyl)-7-[(tetrahydro-2H-pyran-4-yl)methyl]-, (8aR)-  
 (9CI) (CA INDEX NAME)

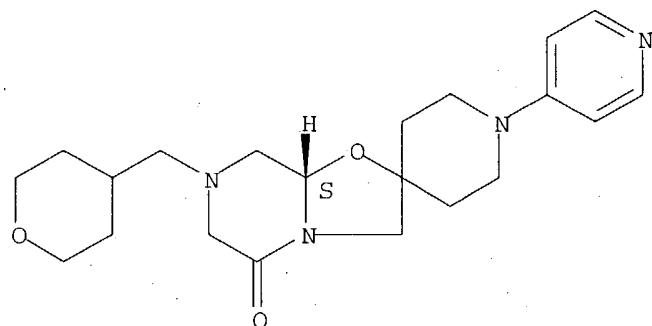
Absolute stereochemistry.



RN 441793-10-8 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
 tetrahydro-1'-(4-pyridinyl)-7-[(tetrahydro-2H-pyran-4-yl)methyl]-, (8aS)-  
 (9CI) (CA INDEX NAME)

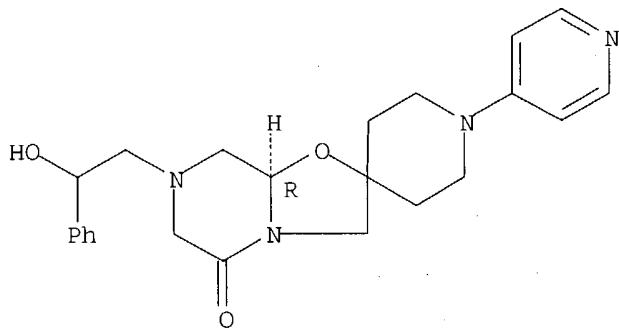
Absolute stereochemistry.



RN 441793-11-9 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
 tetrahydro-7-(2-hydroxy-2-phenylethyl)-1'-(4-pyridinyl)-, (8aR)- (9CI)  
 (CA INDEX NAME)

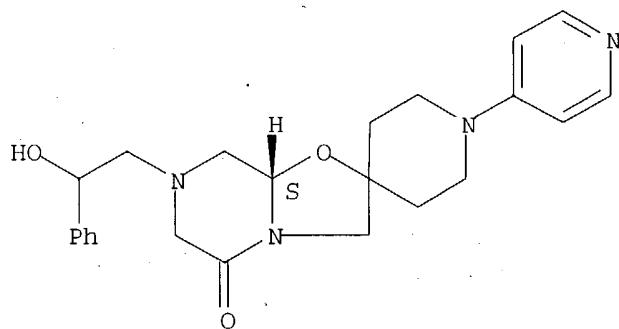
Absolute stereochemistry.



RN 441793-12-0 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
tetrahydro-7-(2-hydroxy-2-phenylethyl)-1'-(4-pyridinyl)-, (8aS)- (9CI)  
(CA INDEX NAME)

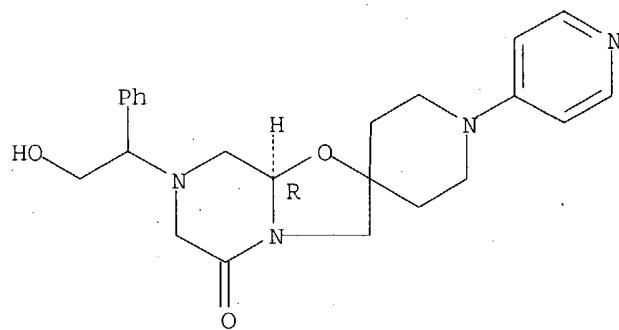
Absolute stereochemistry.



RN 441793-13-1 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
tetrahydro-7-(2-hydroxy-1-phenylethyl)-1'-(4-pyridinyl)-, (8aR)- (9CI)  
(CA INDEX NAME)

Absolute stereochemistry.

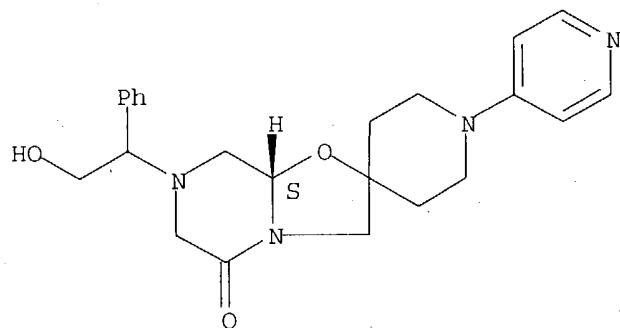


RN 441793-14-2 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,

tetrahydro-7-(2-hydroxy-1-phenylethyl)-1'-(4-pyridinyl)-, (8aS)- (9CI)  
 (CA INDEX NAME)

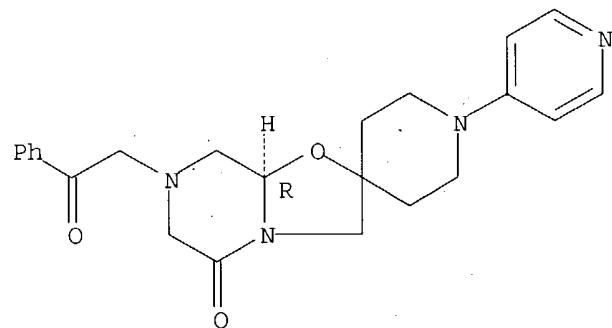
Absolute stereochemistry.



RN 441793-15-3 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
 tetrahydro-7-(2-oxo-2-phenylethyl)-1'-(4-pyridinyl)-, (8aR)- (9CI) (CA  
 INDEX NAME)

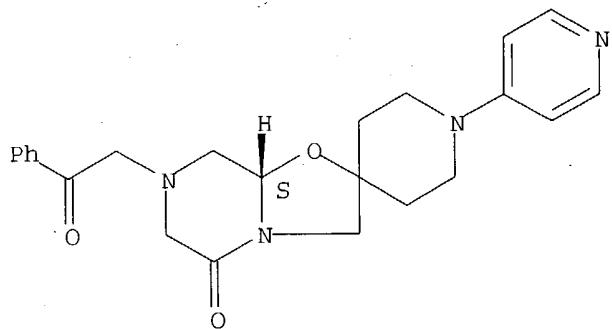
Absolute stereochemistry.



RN 441793-16-4 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
 tetrahydro-7-(2-oxo-2-phenylethyl)-1'-(4-pyridinyl)-, (8aS)- (9CI) (CA  
 INDEX NAME)

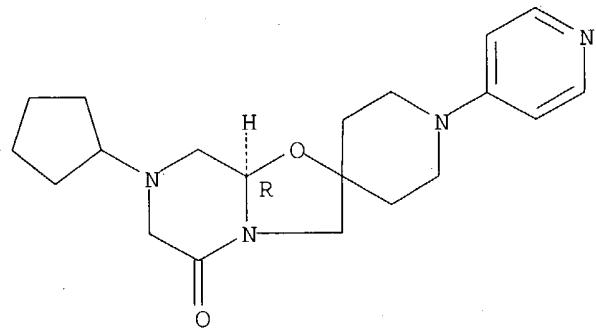
Absolute stereochemistry.



RN 441793-17-5 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
7-cyclopentyltetrahydro-1'-(4-pyridinyl)-, (8aR)- (9CI) (CA INDEX NAME)

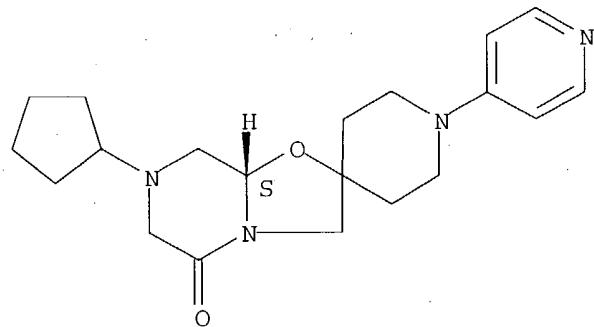
Absolute stereochemistry.



RN 441793-18-6 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
7-cyclopentyltetrahydro-1'-(4-pyridinyl)-, (8aS)- (9CI) (CA INDEX NAME)

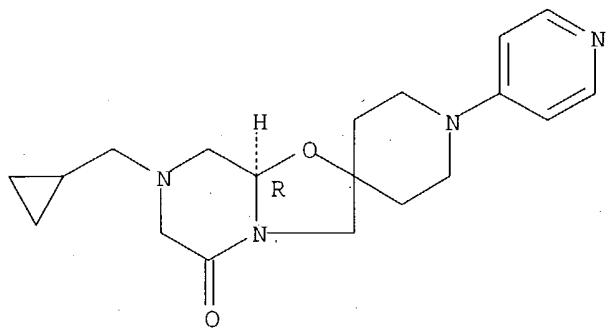
Absolute stereochemistry.



RN 441793-19-7 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
7-(cyclopropylmethyl)tetrahydro-1'-(4-pyridinyl)-, (8aR)- (9CI) (CA INDEX  
NAME)

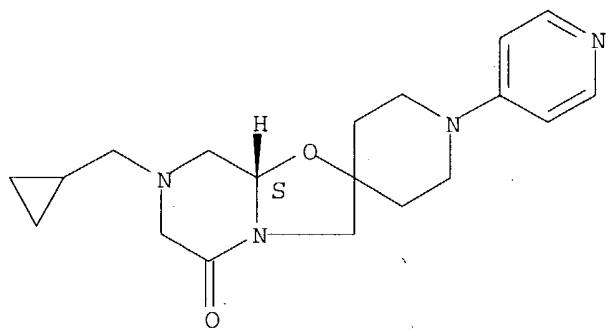
Absolute stereochemistry.



RN 441793-20-0 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
7-(cyclopropylmethyl)tetrahydro-1'-(4-pyridinyl)-, (8aS)- (9CI) (CA INDEX  
NAME)

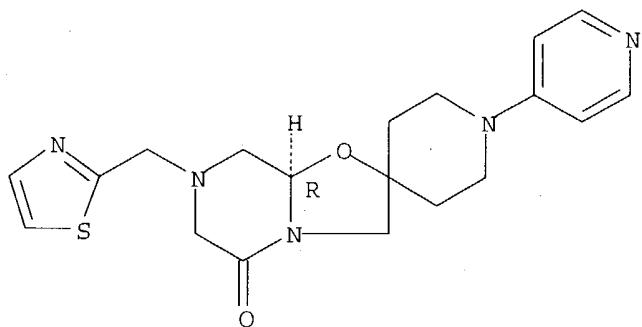
Absolute stereochemistry.



RN 441793-21-1 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
tetrahydro-1'-(4-pyridinyl)-7-(2-thiazolylmethyl)-, (8aR)- (9CI) (CA  
INDEX NAME)

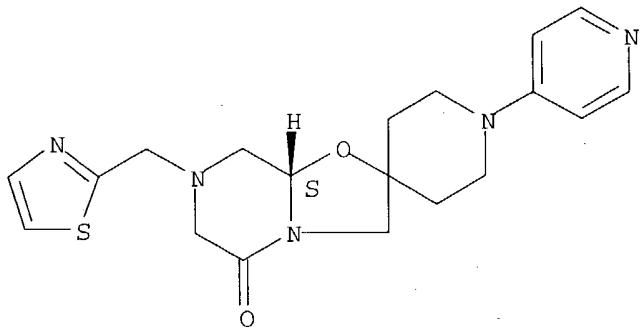
Absolute stereochemistry.



RN 441793-22-2 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
tetrahydro-1'-(4-pyridinyl)-7-(2-thiazolylmethyl)-, (8aS)- (9CI) (CA  
INDEX NAME)

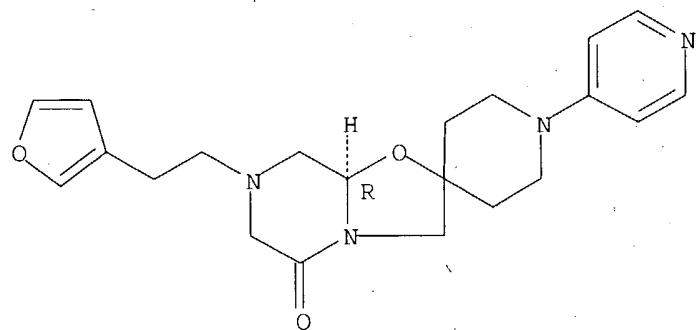
Absolute stereochemistry.



RN 441793-23-3 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
7-[2-(3-furanyl)ethyl]tetrahydro-1'-(4-pyridinyl)-, (8aR)- (9CI) (CA  
INDEX NAME)

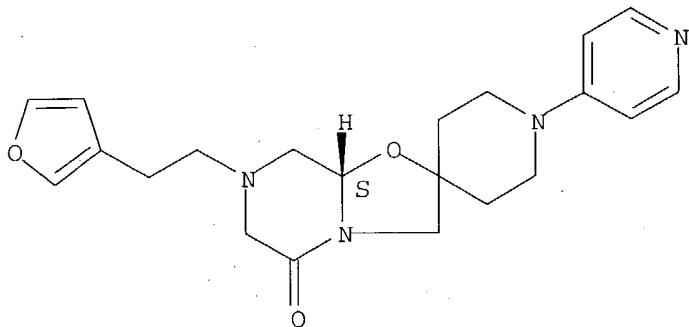
Absolute stereochemistry.



RN 441793-24-4 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
7-[2-(3-furanyl)ethyl]tetrahydro-1'-(4-pyridinyl)-, (8aS)- (9CI) (CA  
INDEX NAME)

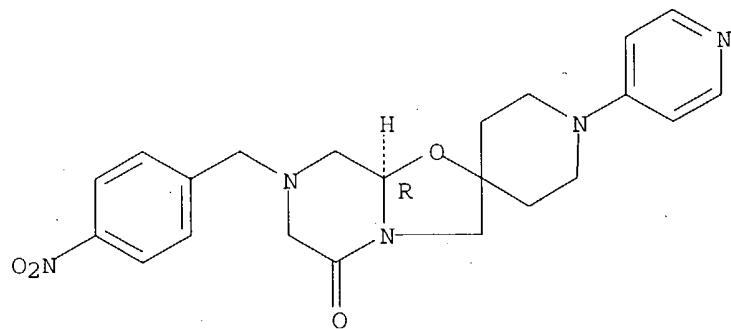
Absolute stereochemistry.



RN 441793-25-5 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
tetrahydro-7-[(4-nitrophenyl)methyl]-1'-(4-pyridinyl)-, (8aR)- (9CI) (CA  
INDEX NAME)

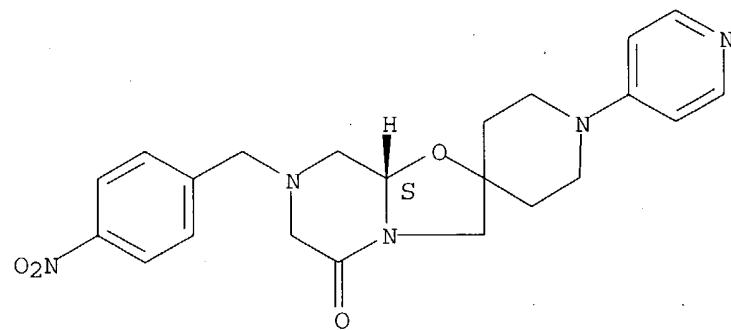
Absolute stereochemistry.



RN 441793-26-6 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
tetrahydro-7-[(4-nitrophenyl)methyl]-1'-(4-pyridinyl)-, (8aS)- (9CI) (CA  
INDEX NAME)

Absolute stereochemistry.

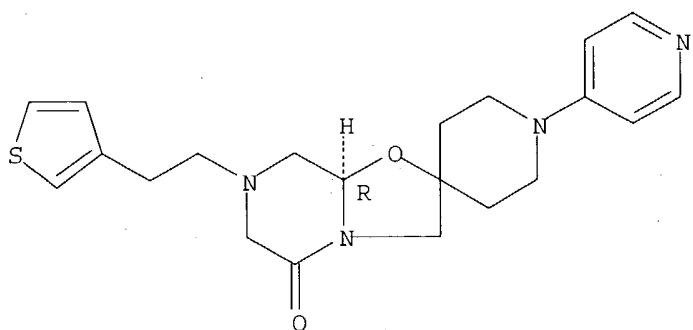


RN 441793-27-7 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,

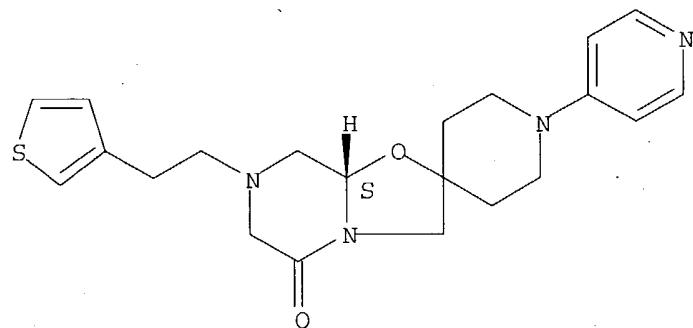
tetrahydro-1'-(4-pyridinyl)-7-[2-(3-thienyl)ethyl]-, (8aR)- (9CI) (CA  
INDEX NAME)

Absolute stereochemistry.



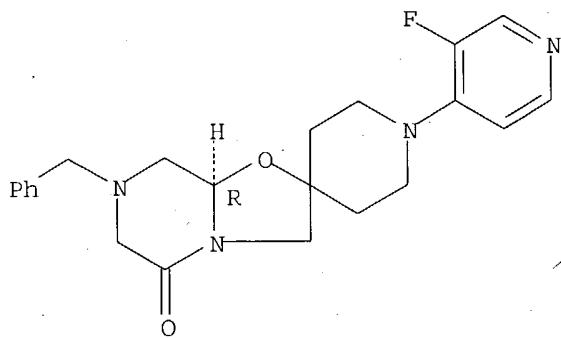
RN 441793-28-8 CAPLUS  
CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
tetrahydro-1'-(4-pyridinyl)-7-[2-(3-thienyl)ethyl]-, (8aS)- (9CI) (CA  
INDEX NAME)

Absolute stereochemistry.



RN 441793-29-9 CAPLUS  
CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
1'-(3-fluoro-4-pyridinyl)tetrahydro-7-(phenylmethyl)-, (8aR)- (9CI) (CA  
INDEX NAME)

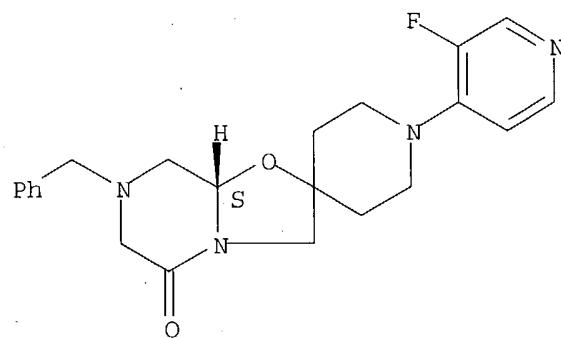
Absolute stereochemistry.



RN 441793-30-2 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H), 4'-piperidin]-5-one,  
1'-(3-fluoro-4-pyridinyl)tetrahydro-7-(phenylmethyl)-, (8aS)- (9CI) (CA INDEX NAME)

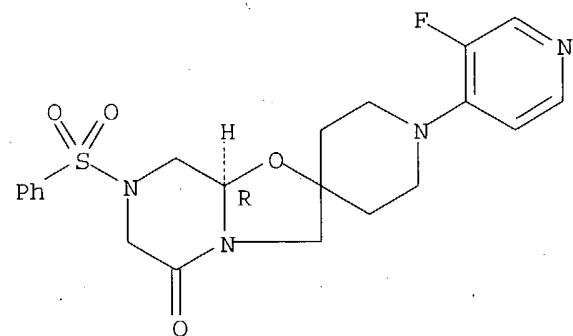
Absolute stereochemistry.



RN 441793-31-3 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H), 4'-piperidin]-5-one,  
1'-(3-fluoro-4-pyridinyl)tetrahydro-7-(phenylsulfonyl)-, (8aR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

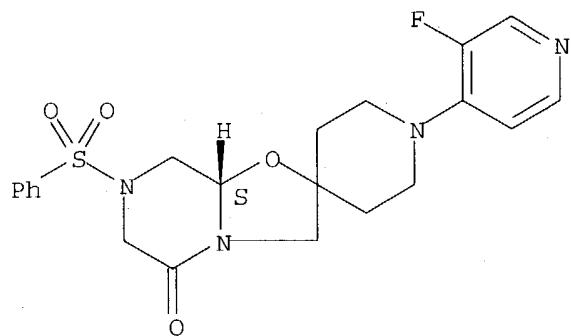


RN 441793-32-4 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H), 4'-piperidin]-5-one,

1'--(3-fluoro-4-pyridinyl)tetrahydro-7-(phenylsulfonyl)-, (8aS)- (9CI) (CA INDEX NAME)

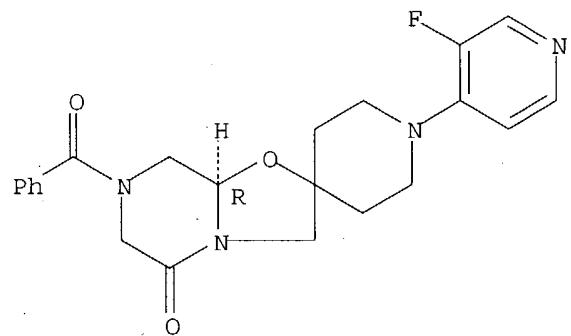
Absolute stereochemistry.



RN 441793-33-5 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
7-benzoyl-1'-(3-fluoro-4-pyridinyl)tetrahydro-, (8aR)- (9CI) (CA INDEX NAME)

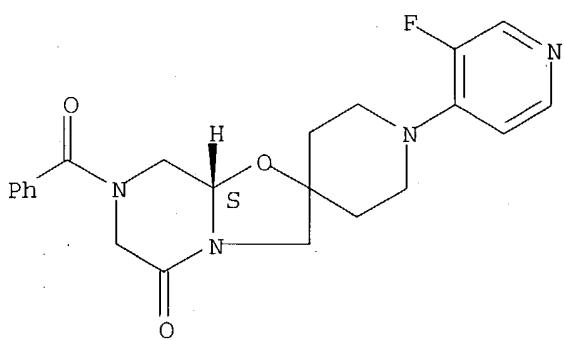
Absolute stereochemistry.



RN 441793-34-6 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
7-benzoyl-1'-(3-fluoro-4-pyridinyl)tetrahydro-, (8aS)- (9CI) (CA INDEX NAME)

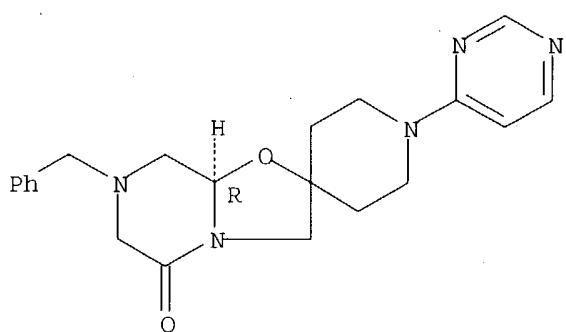
Absolute stereochemistry.



RN 441793-35-7 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
tetrahydro-7-(phenylmethyl)-1'-(4-pyrimidinyl)-, (8aR)- (9CI) (CA INDEX  
NAME)

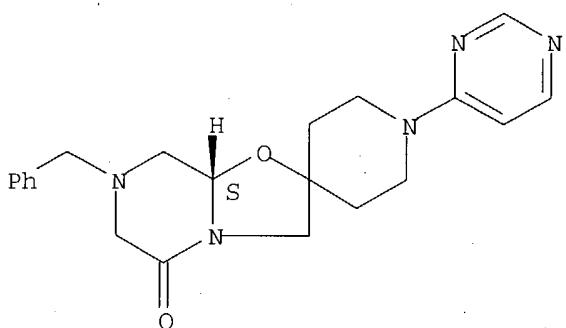
Absolute stereochemistry.



RN 441793-36-8 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
tetrahydro-7-(phenylmethyl)-1'-(4-pyrimidinyl)-, (8aS)- (9CI) (CA INDEX  
NAME)

Absolute stereochemistry.

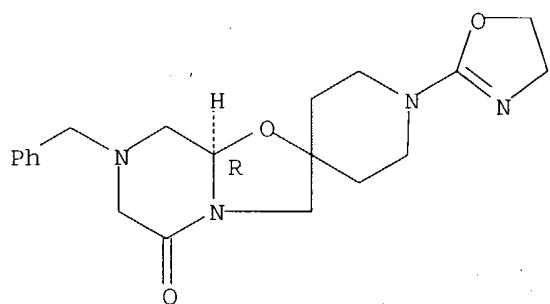


RN 441793-37-9 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,

1'-(4,5-dihydro-2-oxazolyl)tetrahydro-7-(phenylmethyl)-, (8aR)- (9CI) (CA INDEX NAME)

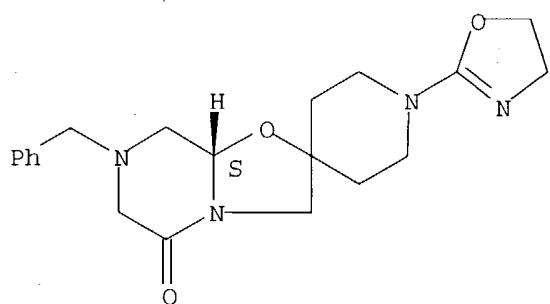
Absolute stereochemistry.



RN 441793-38-0 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
1'-(4,5-dihydro-2-oxazolyl)tetrahydro-7-(phenylmethyl)-, (8aS)- (9CI) (CA INDEX NAME)

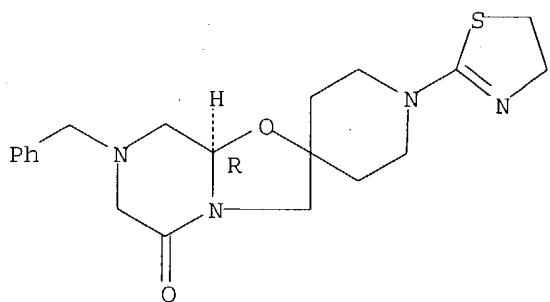
Absolute stereochemistry.



RN 441793-39-1 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
1'-(4,5-dihydro-2-thiazolyl)tetrahydro-7-(phenylmethyl)-, (8aR)- (9CI) (CA INDEX NAME)

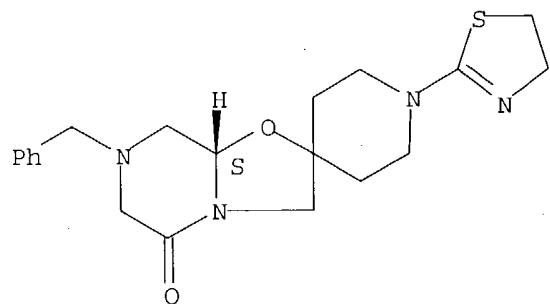
Absolute stereochemistry.



RN 441793-40-4 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
1'-(4,5-dihydro-2-thiazolyl)tetrahydro-7-(phenylmethyl)-, (8aS)- (9CI)  
(CA INDEX NAME)

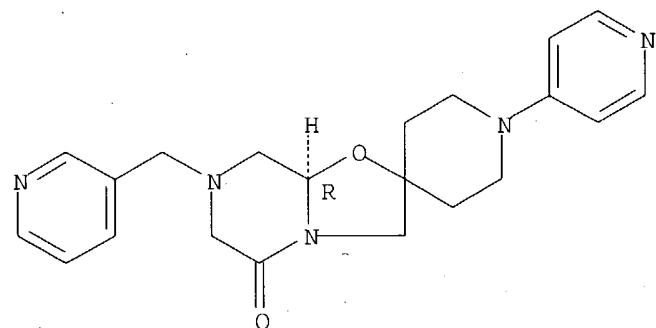
Absolute stereochemistry.



RN 441793-41-5 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
tetrahydro-1'-(4-pyridinyl)-7-(3-pyridinylmethyl)-, (8aR)- (9CI) (CA  
INDEX NAME)

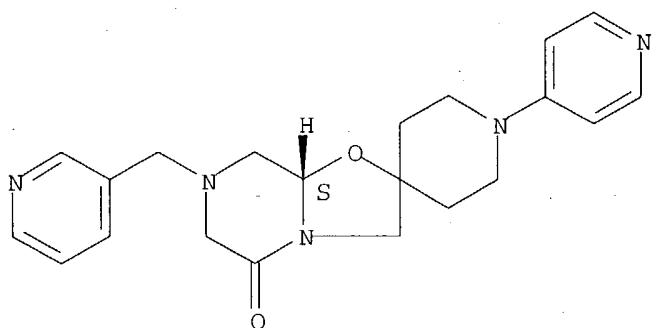
Absolute stereochemistry.



RN 441793-42-6 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
tetrahydro-1'-(4-pyridinyl)-7-(3-pyridinylmethyl)-, (8aS)- (9CI) (CA  
INDEX NAME)

Absolute stereochemistry.



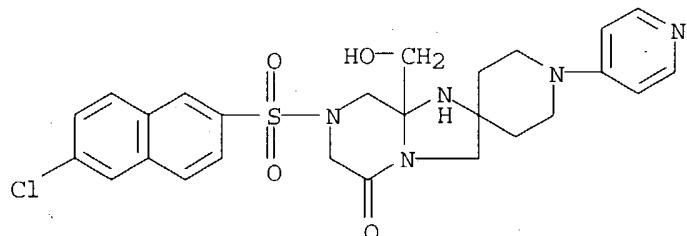
IT 318988-26-0P 318988-27-1P 318988-28-2P  
 441790-23-4P 441790-24-5P 441790-25-6P  
 441790-26-7P 441790-27-8P 441790-28-9P  
 441790-29-0P 441790-30-3P 441790-31-4P  
 441790-35-8P 441790-36-9P 441790-37-0P  
 441790-38-1P 441790-40-5P 441790-41-6P  
 441790-42-7P 441790-43-8P 441790-44-9P  
 441790-46-1P 441790-47-2P 441790-55-2P  
 441790-56-3P 441790-57-4P 441790-80-3P  
 441790-81-4P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of tricyclic spiro compds. as oxidosqualene cyclase inhibitors and cholesterol biosynthesis inhibitors for preventives and therapeutic agents)

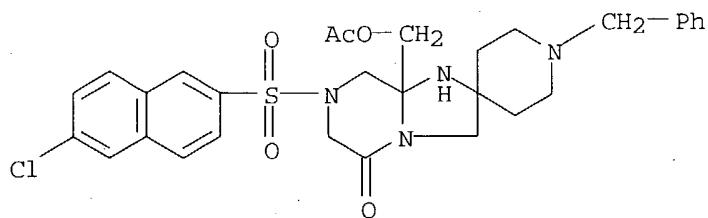
RN 318988-26-0 CAPLUS

CN Spiro[imidazo[1,2-a]pyrazine-2(3H),4'-piperidin]-5(1H)-one,  
 7-[(6-chloro-2-naphthalenyl)sulfonyl]tetrahydro-8a-(hydroxymethyl)-1'-(4-pyridinyl)- (9CI) (CA INDEX NAME)

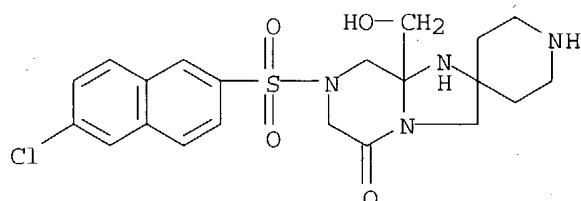


RN 318988-27-1 CAPLUS

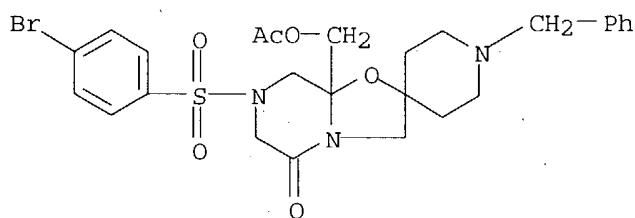
CN Spiro[imidazo[1,2-a]pyrazine-2(3H),4'-piperidin]-5(1H)-one,  
 8a-[(acetoxy)methyl]-7-[(6-chloro-2-naphthalenyl)sulfonyl]tetrahydro-1'-(phenylmethyl)- (9CI) (CA INDEX NAME)



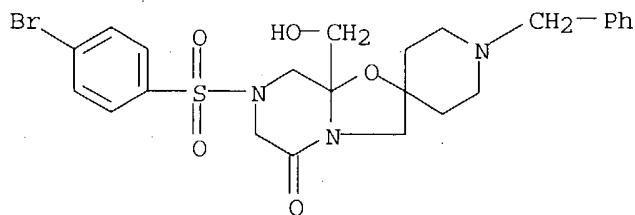
RN 318988-28-2 CAPLUS

CN Spiro[imidazo[1,2-a]pyrazine-2(3H),4'-piperidin]-5(1H)-one,  
7-[ (6-chloro-2-naphthalenyl)sulfonyl]tetrahydro-8a-(hydroxymethyl)- (9CI)  
(CA INDEX NAME)

RN 441790-23-4 CAPLUS

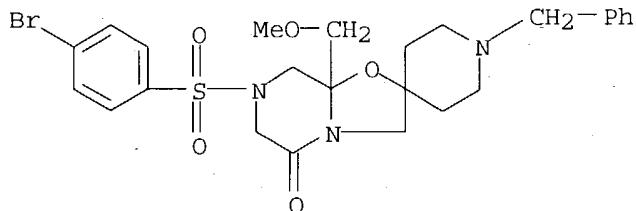
CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
8a-[(acetyloxy)methyl]-7-[ (4-bromophenyl)sulfonyl]tetrahydro-1'-  
(phenylmethyl)- (9CI) (CA INDEX NAME)

RN 441790-24-5 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
7-[ (4-bromophenyl)sulfonyl]tetrahydro-8a-(hydroxymethyl)-1'- (phenylmethyl)-  
(9CI) (CA INDEX NAME)

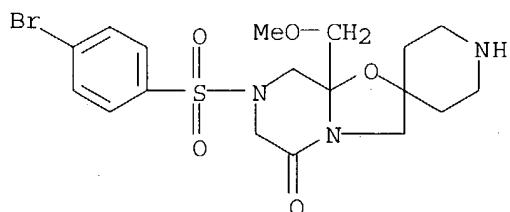
RN 441790-25-6 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
 7-[(4-bromophenyl)sulfonyl]tetrahydro-8a-(methoxymethyl)-1'-(phenylmethyl)-  
 (9CI) (CA INDEX NAME)



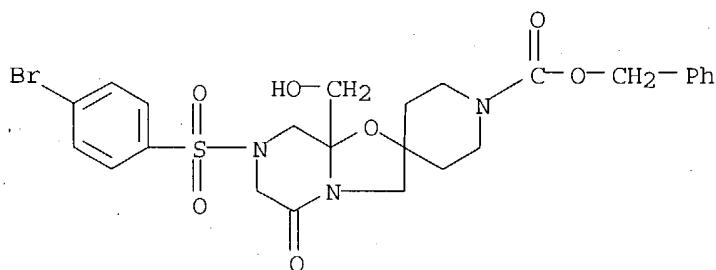
RN 441790-26-7 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
 7-[(4-bromophenyl)sulfonyl]tetrahydro-8a-(methoxymethyl)- (9CI) (CA INDEX  
 NAME)



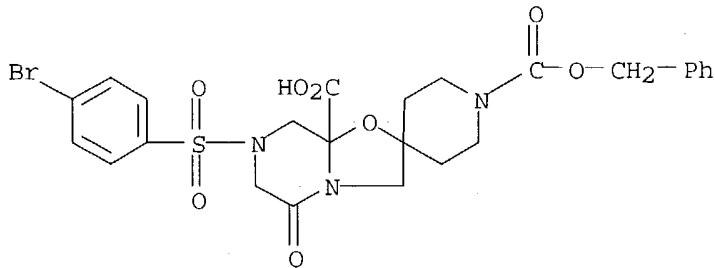
RN 441790-27-8 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidine]-1'-carboxylic acid,  
 7-[(4-bromophenyl)sulfonyl]tetrahydro-8a-(hydroxymethyl)-5-oxo-,  
 phenylmethyl ester (9CI) (CA INDEX NAME)



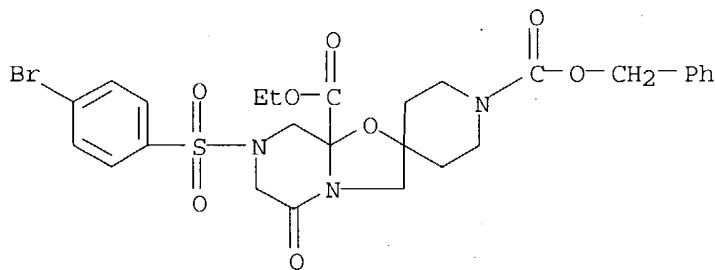
RN 441790-28-9 CAPLUS

CN Spiro[8aH-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidine]-1',8a-dicarboxylic  
 acid, 7-[(4-bromophenyl)sulfonyl]tetrahydro-5-oxo-, 1'-(phenylmethyl)  
 ester (9CI) (CA INDEX NAME)



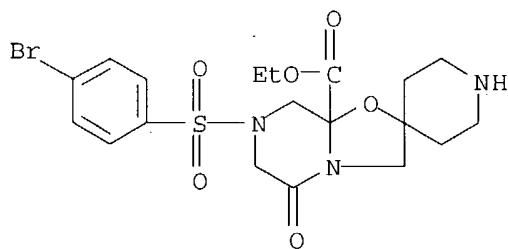
RN 441790-29-0 CAPLUS

CN Spiro[8aH-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidine]-1',8a-dicarboxylic acid, 7-[(4-bromophenyl)sulfonyl]tetrahydro-5-oxo-, 8a-ethyl 1'-(phenylmethyl) ester (9CI) (CA INDEX NAME)



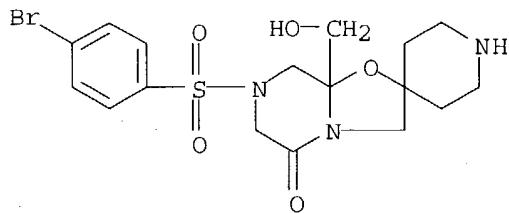
RN 441790-30-3 CAPLUS

CN Spiro[8aH-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidine]-8a-carboxylic acid, 7-[(4-bromophenyl)sulfonyl]tetrahydro-5-oxo-, ethyl ester (9CI) (CA INDEX NAME)

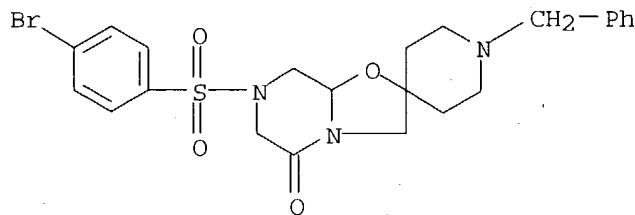


RN 441790-31-4 CAPLUS

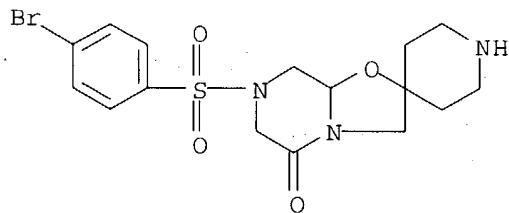
CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one, 7-[(4-bromophenyl)sulfonyl]tetrahydro-8a-(hydroxymethyl)- (9CI) (CA INDEX NAME)



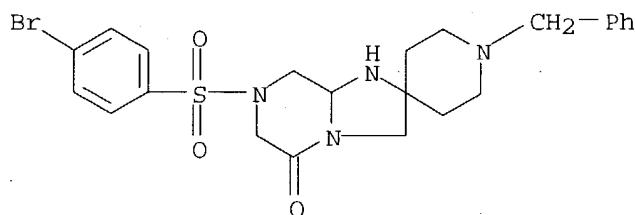
RN 441790-35-8 CAPLUS  
 CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
 7-[(4-bromophenyl)sulfonyl]tetrahydro-1'- (phenylmethyl)- (9CI) (CA INDEX NAME)



RN 441790-36-9 CAPLUS  
 CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
 7-[(4-bromophenyl)sulfonyl]tetrahydro- (9CI) (CA INDEX NAME)

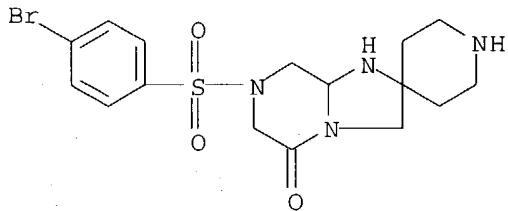


RN 441790-37-0 CAPLUS  
 CN Spiro[imidazo[1,2-a]pyrazine-2(3H),4'-piperidin]-5(1H)-one,  
 7-[(4-bromophenyl)sulfonyl]tetrahydro-1'- (phenylmethyl)- (9CI) (CA INDEX NAME)



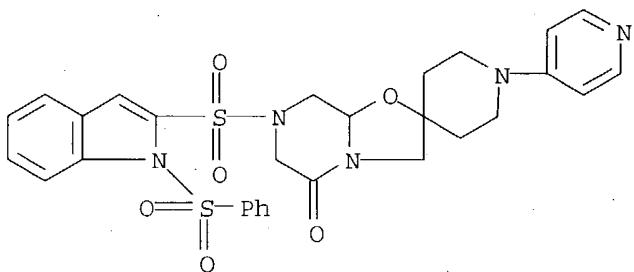
RN 441790-38-1 CAPLUS

CN Spiro[imidazo[1,2-a]pyrazine-2(3H),4'-piperidin]-5(1H)-one,  
7-[(4-bromophenyl)sulfonyl]tetrahydro- (9CI) (CA INDEX NAME)



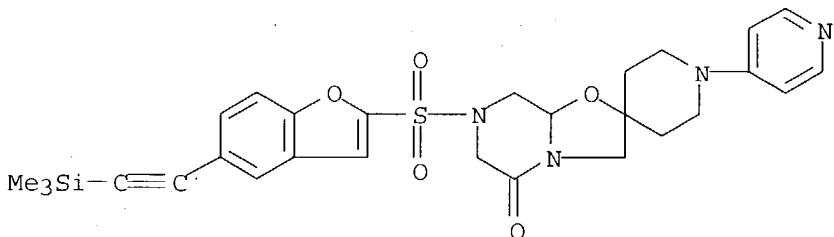
RN 441790-40-5 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
tetrahydro-7-[[1-(phenylsulfonyl)-1H-indol-2-yl]sulfonyl]-1'-(4-pyridinyl)-  
(9CI) (CA INDEX NAME)



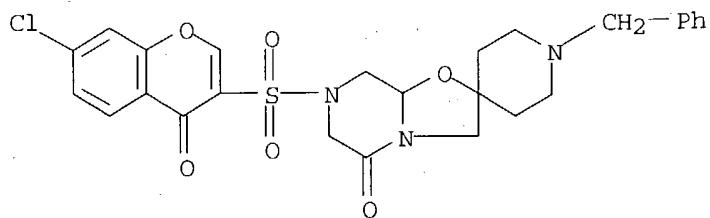
RN 441790-41-6 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
tetrahydro-1'-(4-pyridinyl)-7-[[5-[(trimethylsilyl)ethynyl]-2-  
benzofuranyl]sulfonyl]- (9CI) (CA INDEX NAME)

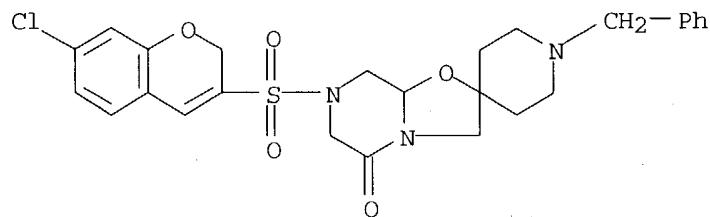


RN 441790-42-7 CAPLUS

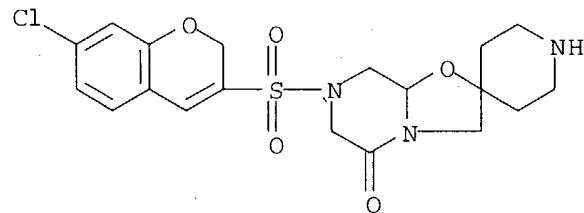
CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
7-[(7-chloro-4-oxo-4H-1-benzopyran-3-yl)sulfonyl]tetrahydro-1'-  
(phenylmethyl)- (9CI) (CA INDEX NAME)



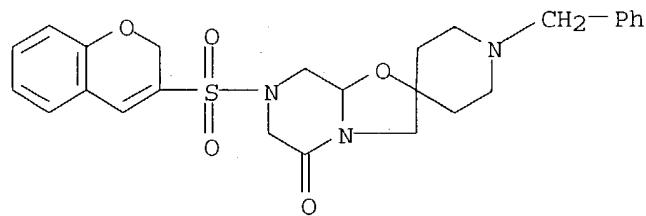
RN 441790-43-8 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
7-[(7-chloro-2H-1-benzopyran-3-yl)sulfonyl]tetrahydro-1'-(phenylmethyl)-  
(9CI) (CA INDEX NAME)

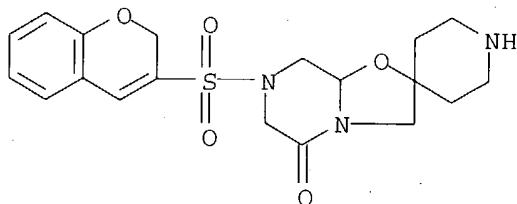
RN 441790-44-9 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
7-[(7-chloro-2H-1-benzopyran-3-yl)sulfonyl]tetrahydro- (9CI) (CA INDEX  
NAME)

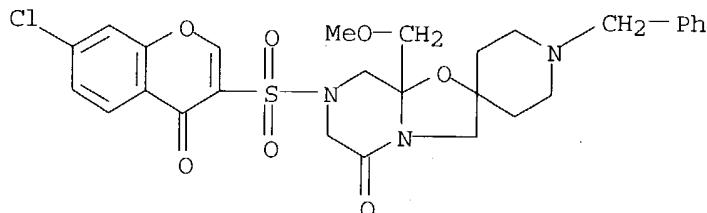
RN 441790-46-1 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
7-(2H-1-benzopyran-3-ylsulfonyl)tetrahydro-1'-(phenylmethyl)- (9CI) (CA  
INDEX NAME)

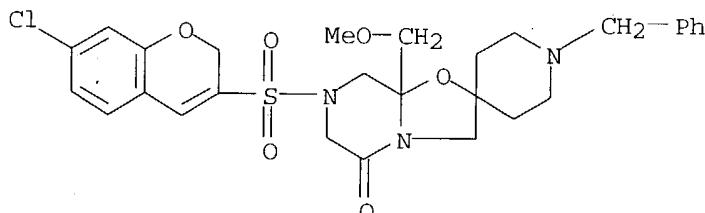
RN 441790-47-2 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
7-(2H-1-benzopyran-3-ylsulfonyl)tetrahydro- (9CI) (CA INDEX NAME)

RN 441790-55-2 CAPLUS

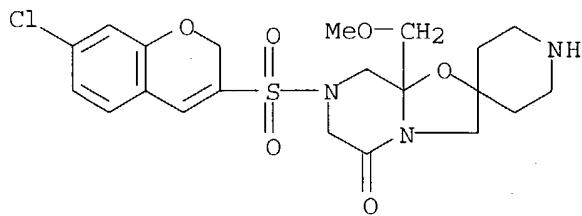
CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
7-[(7-chloro-4-oxo-4H-1-benzopyran-3-yl)sulfonyl]tetrahydro-8a-  
(methoxymethyl)-1'-(phenylmethyl)- (9CI) (CA INDEX NAME)

RN 441790-56-3 CAPLUS

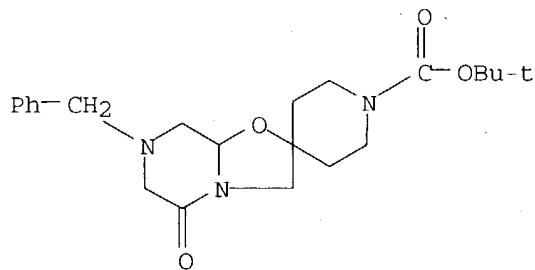
CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
7-[(7-chloro-2H-1-benzopyran-3-yl)sulfonyl]tetrahydro-8a-(methoxymethyl)-  
1'-(phenylmethyl)- (9CI) (CA INDEX NAME)

RN 441790-57-4 CAPLUS

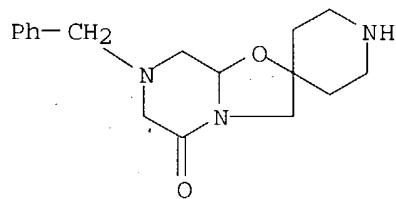
CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
7-[(7-chloro-2H-1-benzopyran-3-yl)sulfonyl]tetrahydro-8a-(methoxymethyl)-  
(9CI) (CA INDEX NAME)



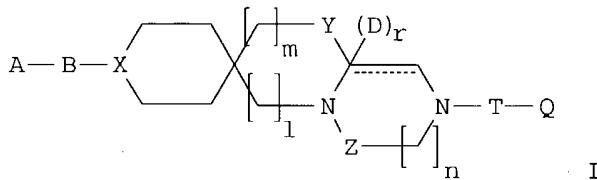
RN 441790-80-3 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidine]-1'-carboxylic acid,  
tetrahydro-5-oxo-7-(phenylmethyl)-, 1,1-dimethylethyl ester (9CI) (CA  
INDEX NAME)

RN 441790-81-4 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
tetrahydro-7-(phenylmethyl)- (9CI) (CA INDEX NAME)

GI

AB Disclosed are orally administrable cholesterol biosynthesis inhibitors and  
oxidosqualene cyclase inhibitors which contain as the active ingredients  
tricyclic spiro compds., i.e. 1,4-diaza-7-oxaspiro[bicyclo[4.3.0]nonane-  
8,4'-piperidine]-2-one and 1,4,7-triazaspiro[bicyclo[4.3.0]nonane-8,4'-

piperidine]-2-one derivs. represented by the general formula (I) or salts thereof: [wherein A = H, (un)substituted 5- or 6-membered (un)saturated heterocyclic or carbocyclic group, (un)substituted NH<sub>2</sub> or imidoyl; B = a single bond, carbonyl, S(O)<sub>x</sub> (x = 0,1,2), C1-2 alkylene; D = H, COR<sub>5</sub> (R<sub>5</sub> = H, substituent), (un)substituted C1-6 alkyl; X = N, CH optionally substituted by A'-B' group (A' and B' are selected from groups defined in A and B, resp.); Y = O, S(O)<sub>y</sub> (y = 0,1,2), NH; Z = CH<sub>2</sub>, CO, C(:S); T = SO<sub>2</sub>, CO, S(O)<sub>z</sub> (z = 0,1,2), a single bond, (un)substituted C1-2 alkylene; Q = (un)substituted hydrocarbon or heterocyclic group; m, n, p = 0,1, or 2, provided that m and p are not simultaneously 0; q = 0,1; each of 3 rings cong. X, Y, and Z is optionally substituted; the solid line accompanied by a dotted line represents a single bond or a double bond when q is 0]. These compds. inhibit oxidosqualene cyclase and in turn the conversion of 2,3-oxidosqualene into cholesterol and thereby exhibit potent serum cholesterol lowering effect and are useful for the prevention and/or treatment of cholesterol biosynthesis and oxidosqualene cyclase-related diseases such as hypercholesterolemia, hyperlipidemia, arteriosclerotic disease, myocardial infarction, angina pectoris, cerebral infarction, cerebral hemorrhage, aortic aneurysm, peripheral artery obstruction, nephrosclerosis, optic nerve atrophy, hydrocephalus, and fungal infection. Thus, Et<sub>3</sub>N and 4-bromobenzenesulfonyl chloride were added to a son. of 1,4-diaza-4-(benzyloxycarbonyl)-7-oxaspiro[bicyclo[4.3.0]nonane-8,4'-piperidine]-2-one in CH<sub>2</sub>Cl<sub>2</sub> and stirred at room temperature for 10 min to give 1,4-diaza-4-(benzyloxycarbonyl)-1'-(4-bromobenzenesulfonyl)-7-oxaspiro[bicyclo[4.3.0]nonane-8,4'-piperidine]-2-one which was dissolved in MeCN, treated with trimethylsilyl iodide under ice-cooling, and stirred for 30 min under ice-cooling to give 1,4-diaza-1'-(4-bromobenzenesulfonyl)-7-oxaspiro[bicyclo[4.3.0]nonane-8,4'-piperidine]-2-one (II). II at 0.3 µg/mL in vitro inhibited the biosynthesis of cholesterol in mouse fibroblast L929 cells by 66%.

RE.CNT 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2004 ACS on STN  
 AN 2001:31501 CAPLUS  
 DN 134:100887  
 TI Preparation of tricyclic compounds having spiro-piperidine as inhibitors of blood coagulation factor X (FXa) and anticoagulants  
 IN Nishida, Hidemitsu; Saitoh, Fumihiko; Harada, Kousuke; Shiromizu, Ikuya  
 PA Mochida Pharmaceutical Co., Ltd., Japan  
 SO PCT Int. Appl., 305 pp.  
 CODEN: PIXXD2

DT Patent  
 LA Japanese

FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2001002397	A1	20010111	WO 2000-JP4374	20000630
	W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				

JP 1999-222883 A 19990630

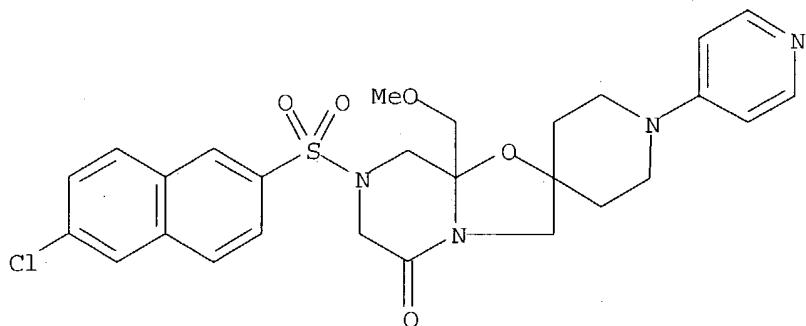
EP 1191028	A1	20020327	EP 2000-940912	20000630
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO			JP 1999-222883 A 19990630 WO 2000-JP4374 W 20000630	
BR 2000012093	A	20020716	BR 2000-12093	20000630
			JP 1999-222883 A 19990630 WO 2000-JP4374 W 20000630	
ZA 2001010558	A	20020912	ZA 2001-10558	20011221
			JP 1999-222883 A 19990630	
US 2003045520	A1	20030306	US 2001-26606	20011227
			JP 1999-222883 A 19990630 WO 2000-JP4374 A220000630	
NO 2001006402	A	20020227	JP 2000-399998 A 20001228 NO 2001-6402	20011228
			JP 1999-222883 A 19990630 WO 2000-JP4374 W 20000630	

## PATENT FAMILY INFORMATION:

FAN 2002:521746

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002053568	A1	20020711	WO 2001-JP11656	20011228
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	JP 2000-399998 A 20001228				
EP	1346994	A1	20030924	EP 2001-272922	20011228
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR JP 2000-399998 A 20001228				
	WO 2001-JP11656W 20011228				
OS	MARPAT 134:100887				
IT	318986-36-6P 318986-38-8P 318987-69-8P 318987-70-1P				
	RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PUR (Purification or recovery); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (preparation of tricyclic compds. having spiro-piperidine as inhibitors of blood coagulation factor X (FXa) and anticoagulants or as pharmacophores in mol. designing Fxa inhibitors)				
RN	318986-36-6 CAPLUS				
CN	Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one, 7-[(6-chloro-2-naphthalenyl)sulfonyl]tetrahydro-8a-(methoxymethyl)-1'-(4-pyridinyl)-, (+)-(9CI) (CA INDEX NAME)				

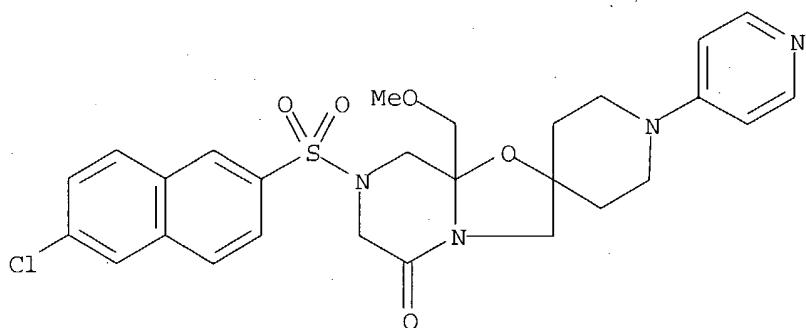
Rotation (+).



RN 318986-38-8 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
7-[(6-chloro-2-naphthalenyl)sulfonyl]tetrahydro-8a-(methoxymethyl)-1'-(4-pyridinyl)-, (-)- (9CI) (CA INDEX NAME)

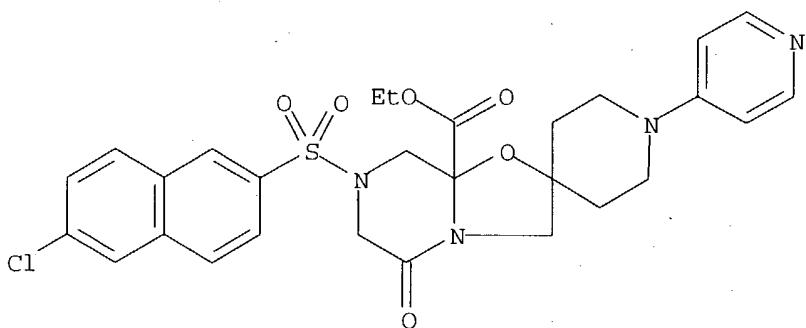
Rotation (-).



RN 318987-69-8 CAPLUS

CN Spiro[8aH-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-8a-carboxylic acid,  
7-[(6-chloro-2-naphthalenyl)sulfonyl]tetrahydro-5-oxo-1'-(4-pyridinyl)-,  
ethyl ester, (+)- (9CI) (CA INDEX NAME)

Rotation (+).

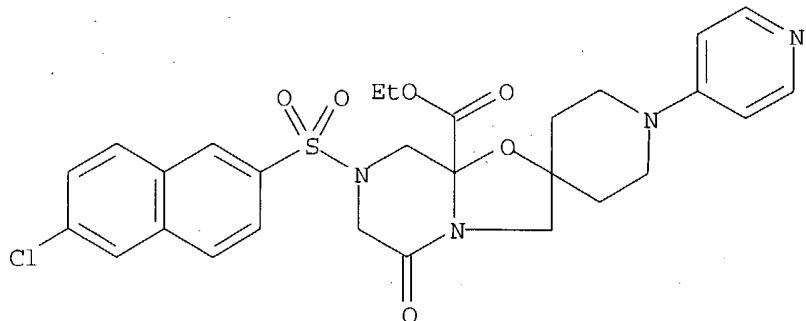


RN 318987-70-1 CAPLUS

CN Spiro[8aH-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-8a-carboxylic acid,

7-[(6-chloro-2-naphthalenyl)sulfonyl]tetrahydro-5-oxo-1'-(4-pyridinyl)-, ethyl ester, (-) - (9CI) (CA INDEX NAME)

Rotation (-).



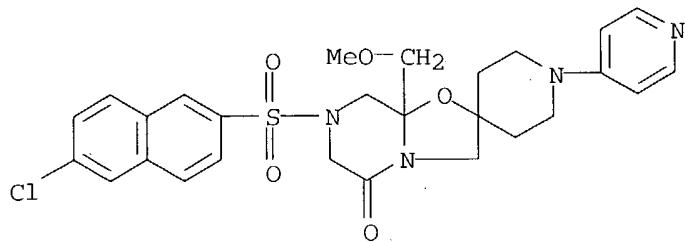
IT 318986-22-0P 318986-60-6P 318986-68-4P  
 318986-74-2P 318986-78-6P 318986-80-0P  
 318987-02-9P 318987-14-3P 318987-29-0P  
 318987-31-4P 318987-33-6P 318987-35-8P  
 318987-37-0P 318987-39-2P 318987-41-6P  
 318987-46-1P 318987-51-8P 318987-52-9P  
 318987-54-1P 318987-56-3P 318987-60-9P  
 318987-61-0P 318987-62-1P 318987-63-2P  
 318987-64-3P 318987-65-4P 318987-66-5P  
 318987-67-6P 318987-72-3P 318987-73-4P  
 318987-74-5P 318987-75-6P 318987-76-7P  
 318987-77-8P 318987-78-9P 318987-79-0P  
 318987-80-3P 318987-81-4P 318987-82-5P  
 318987-83-6P 318987-84-7P 318987-85-8P  
 318987-86-9P 318987-87-0P 318987-88-1P  
 318987-90-5P 318987-91-6P 318987-95-0P  
 318987-96-1P 318987-97-2P 318987-98-3P  
 318987-99-4P 318988-01-1P 318988-02-2P  
 318988-04-4P 318988-06-6P 318988-07-7P  
 318988-08-8P 318988-09-9P 318988-10-2P  
 318988-13-5P 318988-15-7P 318988-16-8P  
 318988-20-4P 318988-21-5P 318988-25-9P  
 318988-26-0P 318988-32-8P 318988-38-4P  
 318988-40-8P 318988-41-9P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

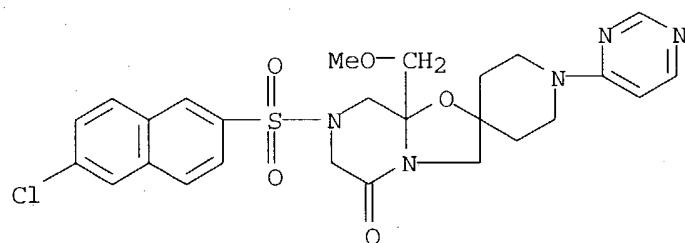
(preparation of tricyclic compds. having spiro-piperidine as inhibitors of blood coagulation factor X (FXa) and anticoagulants or as pharmacophores in mol. designing Fxa inhibitors)

RN 318986-22-0 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
 7-[(6-chloro-2-naphthalenyl)sulfonyl]tetrahydro-8a-(methoxymethyl)-1'-(4-pyridinyl)- (9CI) (CA INDEX NAME)

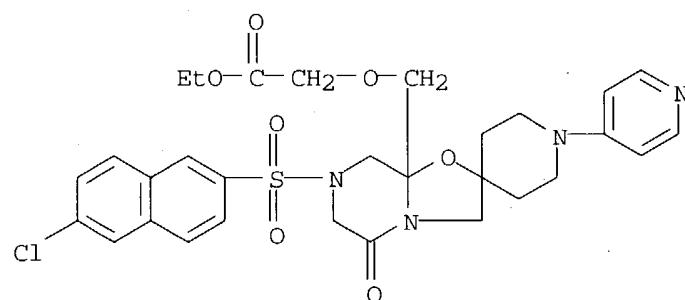


RN 318986-60-6 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
7-[(6-chloro-2-naphthalenyl)sulfonyl]tetrahydro-8a-(methoxymethyl)-1'-(4-pyrimidinyl)- (9CI) (CA INDEX NAME)

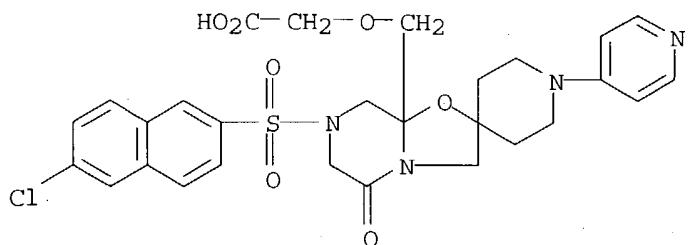
RN 318986-68-4 CAPLUS

CN Acetic acid, [[7-[(6-chloro-2-naphthalenyl)sulfonyl]tetrahydro-5-oxo-1'-(4-pyridinyl)spiro[8aH-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-8a-yl]methoxy]-, ethyl ester (9CI) (CA INDEX NAME)

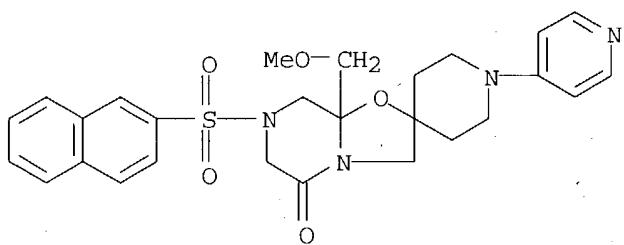


RN 318986-74-2 CAPLUS

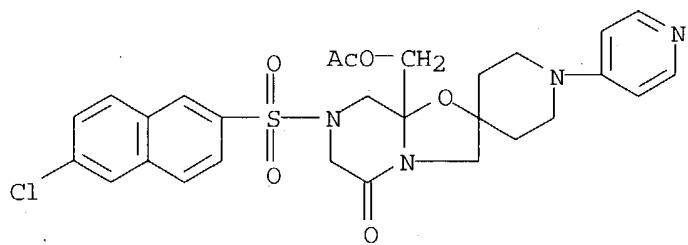
CN Acetic acid, [[7-[(6-chloro-2-naphthalenyl)sulfonyl]tetrahydro-5-oxo-1'-(4-pyridinyl)spiro[8aH-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-8a-yl]methoxy]- (9CI) (CA INDEX NAME)



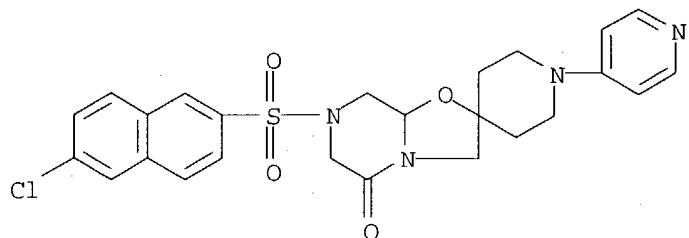
RN 318986-78-6 CAPLUS  
 CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
 tetrahydro-8a- (methoxymethyl)-7- (2-naphthalenylsulfonyl)-1' - (4-pyridinyl)-  
 (9CI) (CA INDEX NAME)



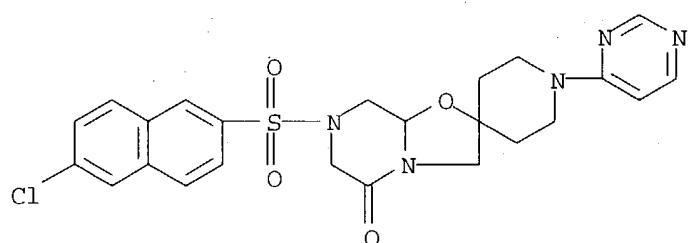
RN 318986-80-0 CAPLUS  
 CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
 8a- [(acetoxy)methyl]-7- [(6-chloro-2-naphthalenyl)sulfonyl]tetrahydro-1' - (4-pyridinyl)- (9CI) (CA INDEX NAME)



RN 318987-02-9 CAPLUS  
 CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
 7- [(6-chloro-2-naphthalenyl)sulfonyl]tetrahydro-1' - (4-pyridinyl)- (9CI)  
 (CA INDEX NAME)



RN 318987-14-3 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
7-[(6-chloro-2-naphthalenyl)sulfonyl]tetrahydro-1'--(4-pyrimidinyl)- (9CI)  
(CA INDEX NAME)

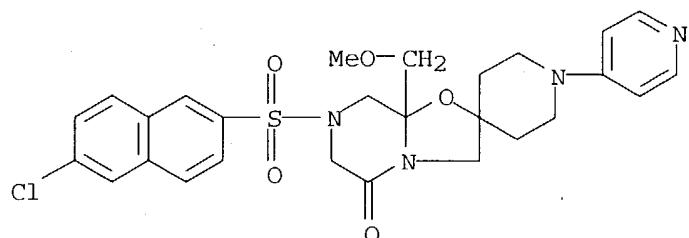
RN 318987-29-0 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
7-[(6-chloro-2-naphthalenyl)sulfonyl]tetrahydro-8a-(methoxymethyl)-1'--(4-pyridinyl)-, monomethanesulfonate (9CI) (CA INDEX NAME)

CM 1

CRN 318986-22-0

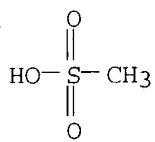
CMF C27 H29 Cl N4 O5 S



CM 2

CRN 75-75-2

CMF C H4 O3 S



RN 318987-31-4 CAPLUS

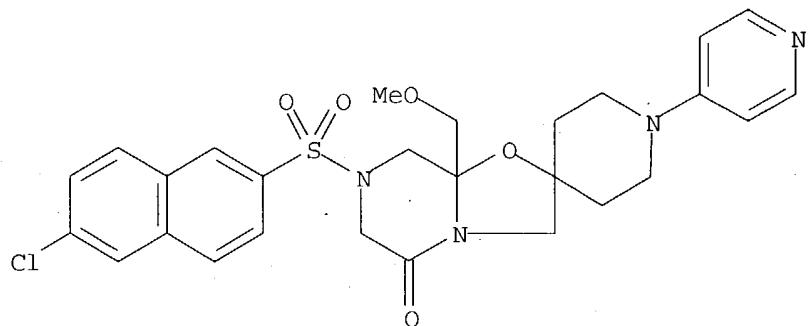
CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
7-[(6-chloro-2-naphthalenyl)sulfonyl]tetrahydro-8a-(methoxymethyl)-1'-(4-pyridinyl)-, (-), monomethanesulfonate (9CI) (CA INDEX NAME)

CM 1

CRN 318986-38-8

CMF C27 H29 Cl N4 O5 S

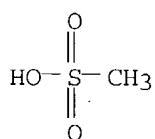
Rotation (-).



CM 2

CRN 75-75-2

CMF C H4 O3 S



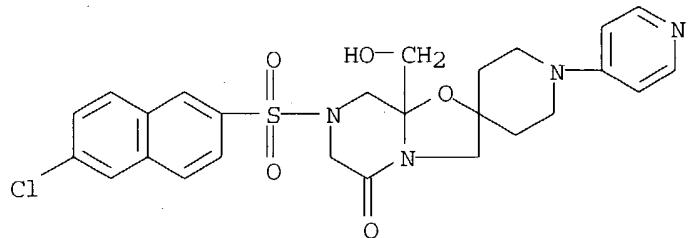
RN 318987-33-6 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
7-[(6-chloro-2-naphthalenyl)sulfonyl]tetrahydro-8a-(hydroxymethyl)-1'-(4-pyridinyl)-, monomethanesulfonate (salt) (9CI) (CA INDEX NAME)

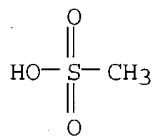
CM 1

CRN 318986-64-0

CMF C26 H27 Cl N4 O5 S



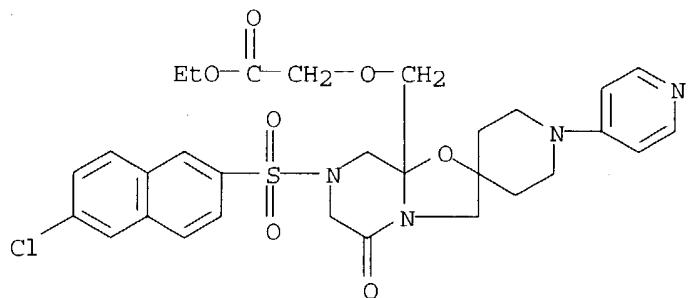
CM 2

CRN 75-75-2  
CMF C H4 O3 S

RN 318987-35-8 CAPLUS

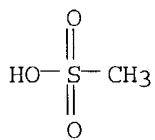
CN Acetic acid, [[7-[(6-chloro-2-naphthalenyl)sulfonyl]tetrahydro-5-oxo-1'-(4-pyridinyl)spiro[8aH-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-8a-yl]methoxy-, ethyl ester, monomethanesulfonate (9CI) (CA INDEX NAME)

CM 1

CRN 318986-68-4  
CMF C30 H33 Cl N4 O7 S

CM 2

CRN 75-75-2  
CMF C H4 O3 S



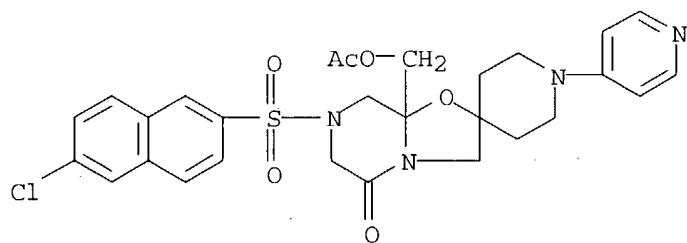
RN 318987-37-0 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
8a-[(acetyloxy)methyl]-7-[(6-chloro-2-naphthalenyl)sulfonyl]tetrahydro-1'-  
(4-pyridinyl)-, monomethanesulfonate (9CI) (CA INDEX NAME)

CM 1

CRN 318986-80-0

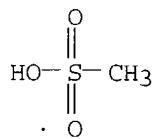
CMF C28 H29 Cl N4 O6 S



CM 2

CRN 75-75-2

CMF C H4 O3 S



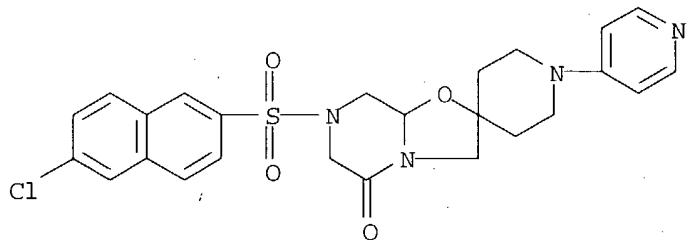
RN 318987-39-2 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
7-[(6-chloro-2-naphthalenyl)sulfonyl]tetrahydro-1'--(4-pyridinyl)-,  
monomethanesulfonate (9CI) (CA INDEX NAME)

CM 1

CRN 318987-02-9

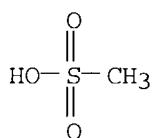
CMF C25 H25 Cl N4 O4 S



CM 2

CRN 75-75-2

CMF C H4 O3 S



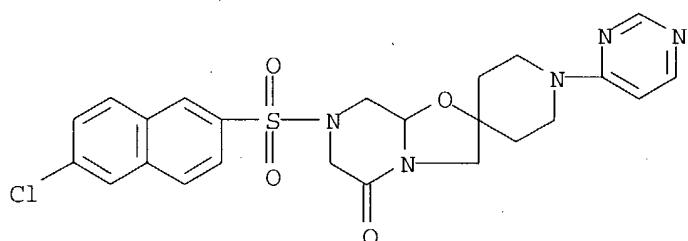
RN 318987-41-6 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
7-[(6-chloro-2-naphthalenyl)sulfonyl]tetrahydro-1'--(4-pyrimidinyl)-  
monomethanesulfonate (9CI) (CA INDEX NAME)

CM 1

CRN 318987-14-3

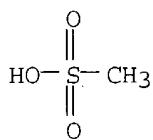
CMF C24 H24 Cl N5 O4 S



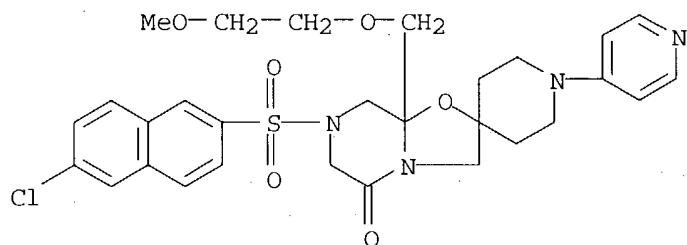
CM 2

CRN 75-75-2

CMF C H4 O3 S



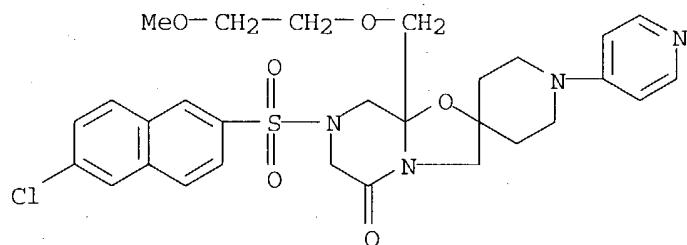
RN 318987-46-1 CAPLUS  
 CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
 7-[(6-chloro-2-naphthalenyl)sulfonyl]tetrahydro-8a-[(2-methoxyethoxy)methyl]-1'-(4-pyridinyl)- (9CI) (CA INDEX NAME)



RN 318987-51-8 CAPLUS  
 CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
 7-[(6-chloro-2-naphthalenyl)sulfonyl]tetrahydro-8a-[(2-methoxyethoxy)methyl]-1'-(4-pyridinyl)-, monomethanesulfonate (9CI) (CA INDEX NAME)

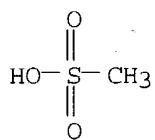
CM 1

CRN 318987-46-1  
 CMF C29 H33 Cl N4 O6 S

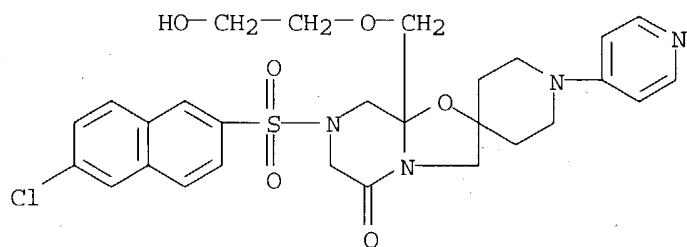


CM 2

CRN 75-75-2  
 CMF C H4 O3 S



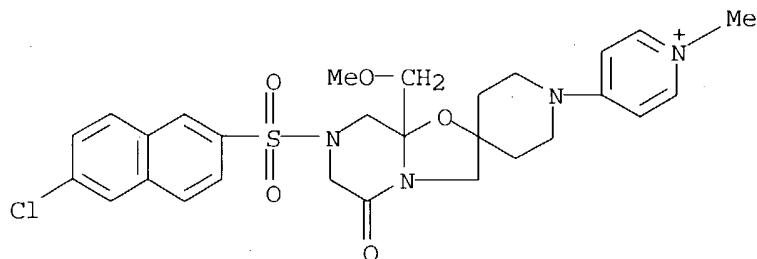
RN 318987-52-9 CAPLUS  
 CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
 7-[ (6-chloro-2-naphthalenyl)sulfonyl]tetrahydro-8a-[ (2-  
 hydroxyethoxy)methyl]-1'-(4-pyridinyl)- (9CI) (CA INDEX NAME)



RN 318987-54-1 CAPLUS  
 CN Pyridinium, 4-[7-[ (6-chloro-2-naphthalenyl)sulfonyl]tetrahydro-8a-  
 (methoxymethyl)-5-oxospiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-  
 1'-yl]-1-methyl-, salt with 4-methylbenzenesulfonic acid (1:1) (9CI) (CA  
 INDEX NAME)

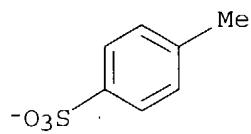
CM 1

CRN 318987-53-0  
 CMF C28 H32 Cl N4 O5 S

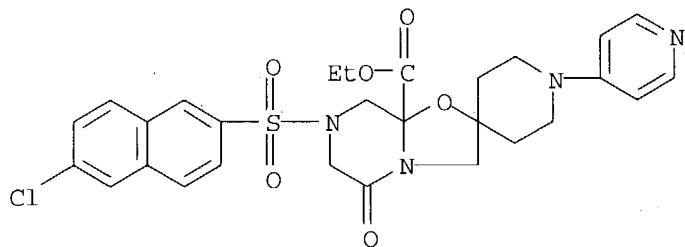


CM 2

CRN 16722-51-3  
 CMF C7 H7 O3 S



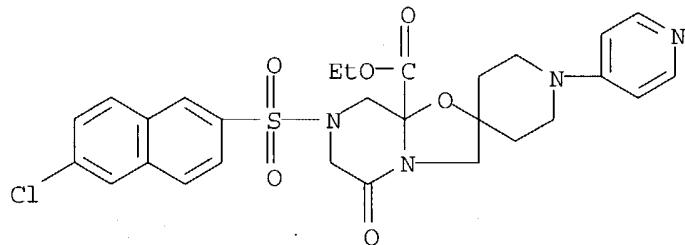
RN 318987-56-3 CAPLUS  
 CN Spiro[8aH-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidine]-8a-carboxylic acid,  
 7-[(6-chloro-2-naphthalenyl)sulfonyl]tetrahydro-5-oxo-1'-(4-pyridinyl)-,  
 ethyl ester (9CI) (CA INDEX NAME)



RN 318987-60-9 CAPLUS  
 CN Spiro[8aH-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidine]-8a-carboxylic acid,  
 7-[(6-chloro-2-naphthalenyl)sulfonyl]tetrahydro-5-oxo-1'-(4-pyridinyl)-,  
 ethyl ester, monomethanesulfonate (9CI) (CA INDEX NAME)

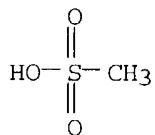
CM 1

CRN 318987-56-3  
 CMF C28 H29 Cl N4 O6 S

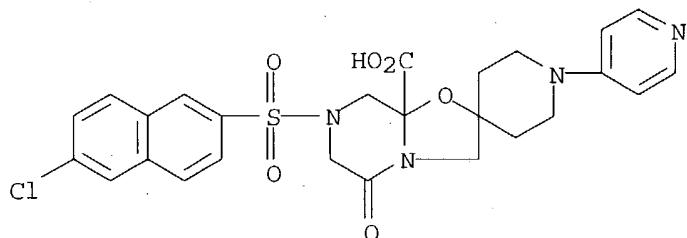


CM 2

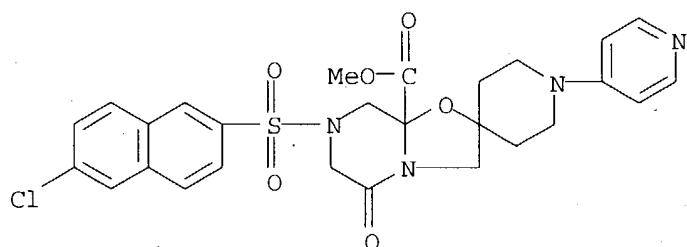
CRN 75-75-2  
 CMF C H4 O3 S



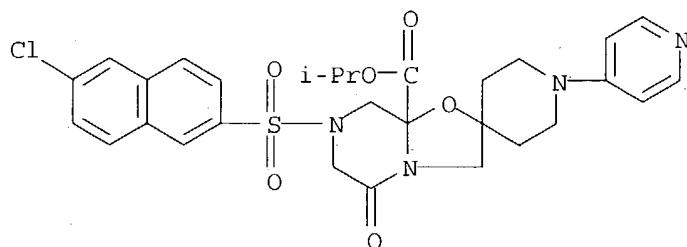
RN 318987-61-0 CAPLUS

CN Spiro[8aH-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidine]-8a-carboxylic acid,  
7-[(6-chloro-2-naphthalenyl)sulfonyl]tetrahydro-5-oxo-1'-(4-pyridinyl)-  
(9CI) (CA INDEX NAME)

RN 318987-62-1 CAPLUS

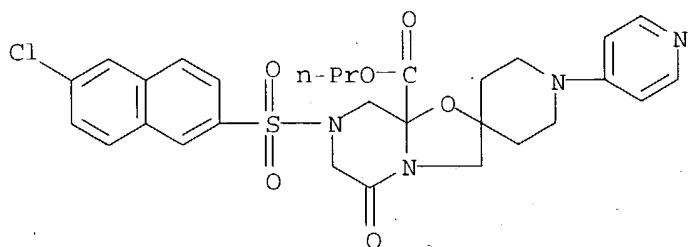
CN Spiro[8aH-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidine]-8a-carboxylic acid,  
7-[(6-chloro-2-naphthalenyl)sulfonyl]tetrahydro-5-oxo-1'-(4-pyridinyl)-,  
methyl ester (9CI) (CA INDEX NAME)

RN 318987-63-2 CAPLUS

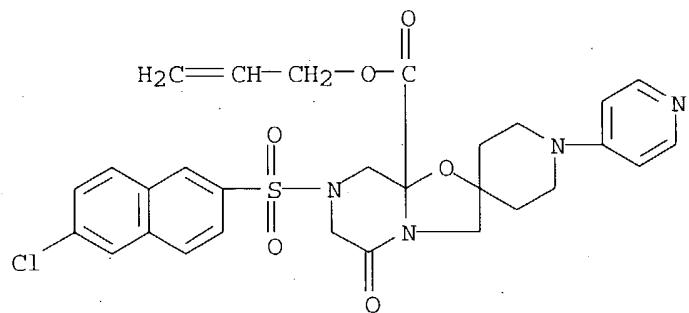
CN Spiro[8aH-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidine]-8a-carboxylic acid,  
7-[(6-chloro-2-naphthalenyl)sulfonyl]tetrahydro-5-oxo-1'-(4-pyridinyl)-,  
1-methylethyl ester (9CI) (CA INDEX NAME)

RN 318987-64-3 CAPLUS

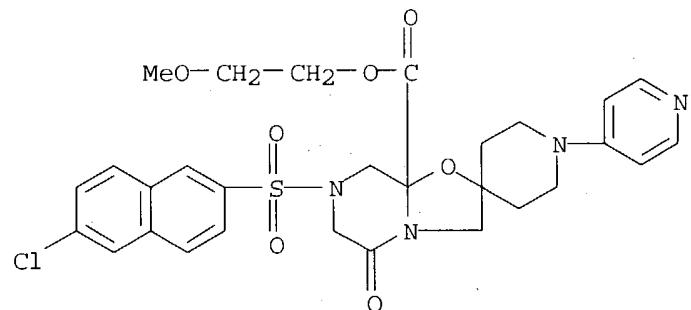
CN Spiro[8aH-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidine]-8a-carboxylic acid,  
7-[(6-chloro-2-naphthalenyl)sulfonyl]tetrahydro-5-oxo-1'-(4-pyridinyl)-,  
propyl ester (9CI) (CA INDEX NAME)



RN 318987-65-4 CAPLUS

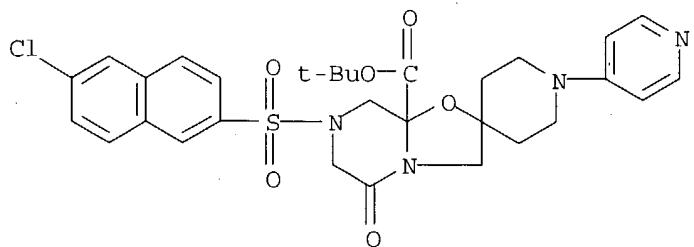
CN Spiro[8aH-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidine]-8a-carboxylic acid,  
7-[(6-chloro-2-naphthalenyl)sulfonyl]tetrahydro-5-oxo-1'-(4-pyridinyl)-  
2-propenyl ester (9CI) (CA INDEX NAME)

RN 318987-66-5 CAPLUS

CN Spiro[8aH-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidine]-8a-carboxylic acid,  
7-[(6-chloro-2-naphthalenyl)sulfonyl]tetrahydro-5-oxo-1'-(4-pyridinyl)-  
2-methoxyethyl ester (9CI) (CA INDEX NAME)

RN 318987-67-6 CAPLUS

CN Spiro[8aH-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidine]-8a-carboxylic acid,  
7-[(6-chloro-2-naphthalenyl)sulfonyl]tetrahydro-5-oxo-1'-(4-pyridinyl)-  
1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



RN 318987-72-3 CAPLUS

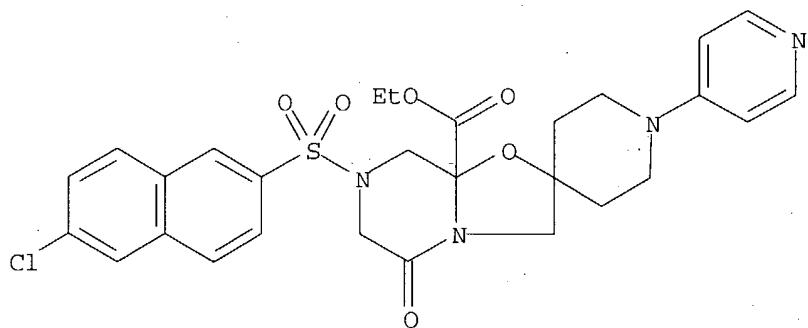
CN Spiro[8aH-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidine]-8a-carboxylic acid,  
7-[(6-chloro-2-naphthalenyl)sulfonyl]tetrahydro-5-oxo-1'-(4-pyridinyl)-,  
ethyl ester, (-)-, monomethanesulfonate (9CI) (CA INDEX NAME)

CM 1

CRN 318987-70-1

CMF C28 H29 Cl N4 O6 S

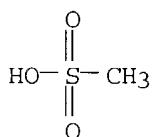
Rotation (-).



CM 2

CRN 75-75-2

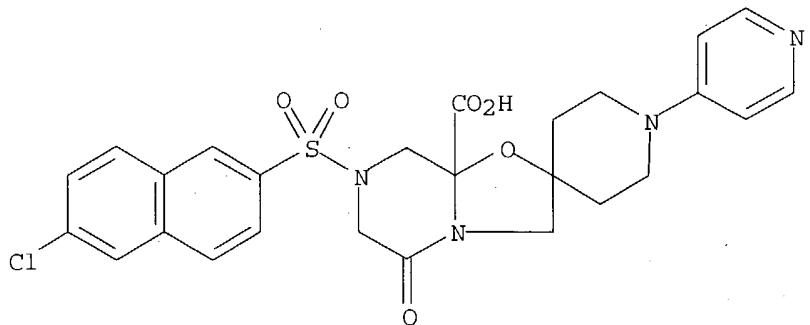
CMF C H4 O3 S



RN 318987-73-4 CAPLUS

CN Spiro[8aH-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidine]-8a-carboxylic acid,  
7-[(6-chloro-2-naphthalenyl)sulfonyl]tetrahydro-5-oxo-1'-(4-pyridinyl)-,  
(-)- (9CI) (CA INDEX NAME)

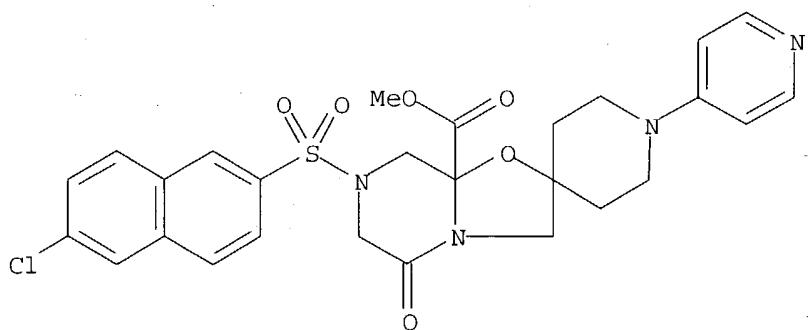
Rotation (-).



RN 318987-74-5 CAPLUS

CN Spiro[8aH-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidine]-8a-carboxylic acid,  
7-[(6-chloro-2-naphthalenyl)sulfonyl]tetrahydro-5-oxo-1'-(4-pyridinyl)-,  
methyl ester, (-)- (9CI) (CA INDEX NAME)

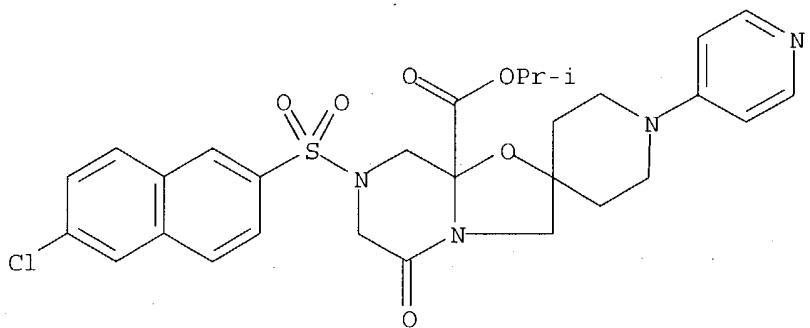
Rotation (-).



RN 318987-75-6 CAPLUS

CN Spiro[8aH-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidine]-8a-carboxylic acid,  
7-[(6-chloro-2-naphthalenyl)sulfonyl]tetrahydro-5-oxo-1'-(4-pyridinyl)-,  
1-methylethyl ester, (-)- (9CI) (CA INDEX NAME)

Rotation (-).

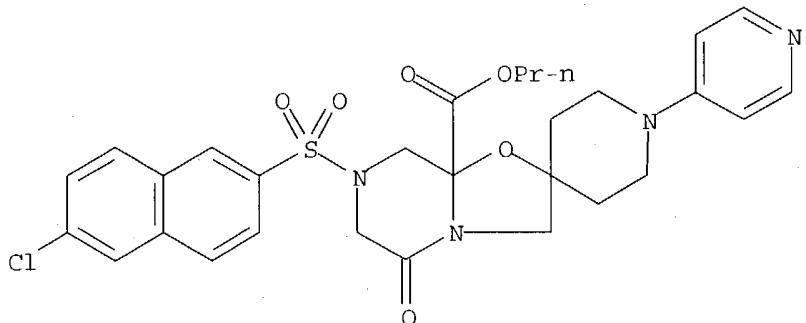


RN 318987-76-7 CAPLUS

CN Spiro[8aH-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidine]-8a-carboxylic acid,

7-[(6-chloro-2-naphthalenyl)sulfonyl]tetrahydro-5-oxo-1'-(4-pyridinyl)-, propyl ester, (-) - (9CI) (CA INDEX NAME)

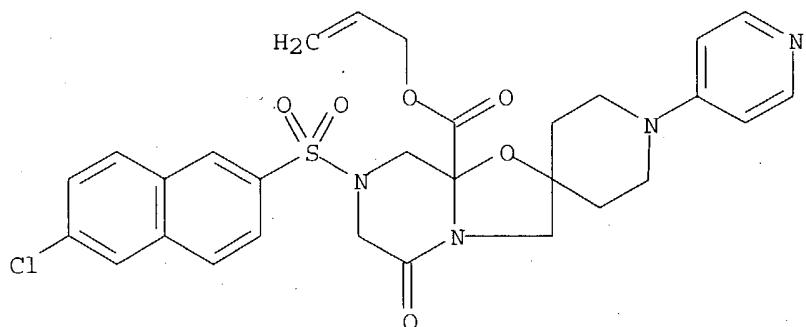
Rotation (-).



RN 318987-77-8 CAPLUS

CN Spiro[8aH-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidine]-8a-carboxylic acid, 7-[(6-chloro-2-naphthalenyl)sulfonyl]tetrahydro-5-oxo-1'-(4-pyridinyl)-, 2-propenyl ester, (-) - (9CI) (CA INDEX NAME)

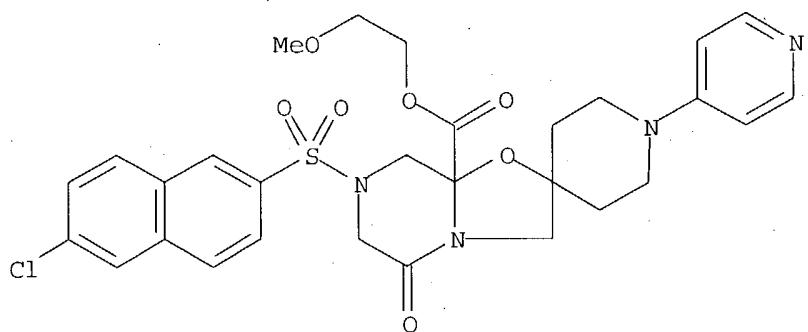
Rotation (-).



RN 318987-78-9 CAPLUS

CN Spiro[8aH-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidine]-8a-carboxylic acid, 7-[(6-chloro-2-naphthalenyl)sulfonyl]tetrahydro-5-oxo-1'-(4-pyridinyl)-, 2-methoxyethyl ester, (-) - (9CI) (CA INDEX NAME)

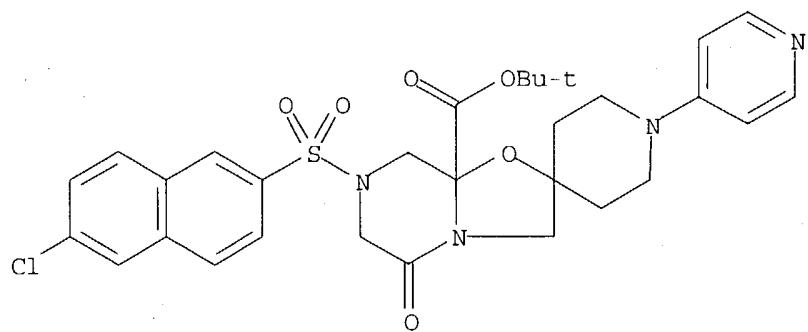
Rotation (-).



RN 318987-79-0 CAPLUS

CN Spiro[8aH-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidine]-8a-carboxylic acid,  
7-[(6-chloro-2-naphthalenyl)sulfonyl]tetrahydro-5-oxo-1'-(4-pyridinyl)-,  
1,1-dimethylethyl ester, (-) - (9CI) (CA INDEX NAME)

Rotation (-).



RN 318987-80-3 CAPLUS

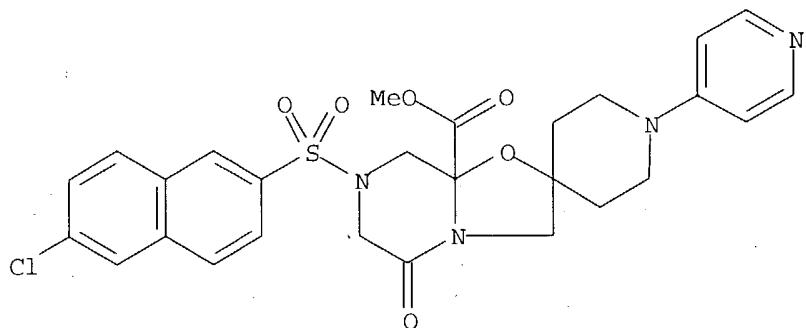
CN Spiro[8aH-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidine]-8a-carboxylic acid,  
7-[(6-chloro-2-naphthalenyl)sulfonyl]tetrahydro-5-oxo-1'-(4-pyridinyl)-,  
methyl ester, (-) -, monomethanesulfonate (9CI) (CA INDEX NAME)

CM 1

CRN 318987-74-5

CMF C27 H27 Cl N4 O6 S

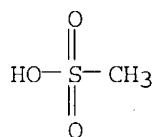
Rotation (-).



CM 2

CRN 75-75-2

CMF C H4 O3 S



RN 318987-81-4 CAPLUS

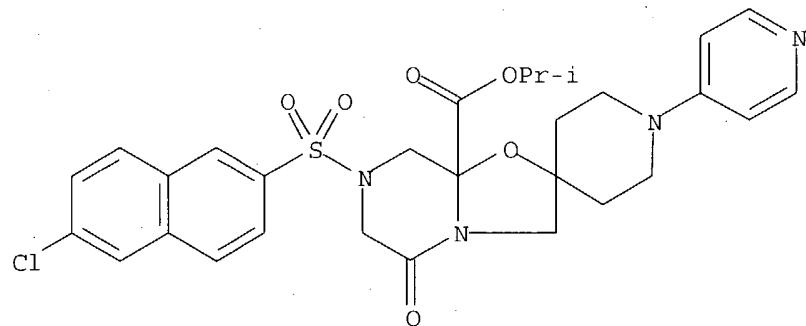
CN Spiro[8aH-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidine]-8a-carboxylic acid,  
7-[(6-chloro-2-naphthalenyl)sulfonyl]tetrahydro-5-oxo-1'-(4-pyridinyl)-  
1-methylethyl ester, (-)-, monomethanesulfonate (9CI) (CA INDEX NAME)

CM 1

CRN 318987-75-6

CMF C29 H31 Cl N4 O6 S

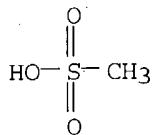
Rotation (-).



CM 2

CRN 75-75-2

CMF C H4 O3 S



RN 318987-82-5 CAPLUS

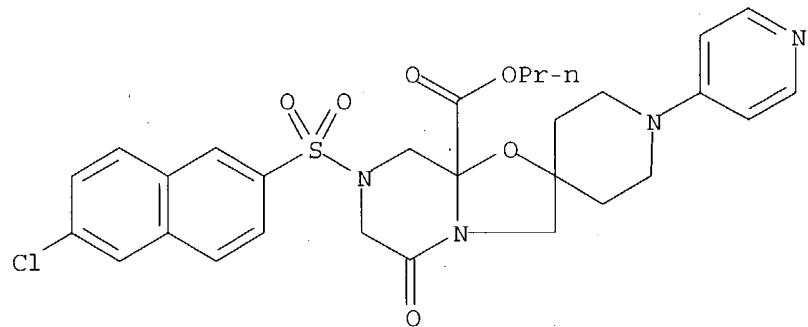
CN Spiro[8aH-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidine]-8a-carboxylic acid,  
7-[(6-chloro-2-naphthalenyl)sulfonyl]tetrahydro-5-oxo-1'-(4-pyridinyl)-,  
propyl ester, (-)-, monomethanesulfonate (9CI) (CA INDEX NAME)

CM 1

CRN 318987-76-7

CMF C29 H31 Cl N4 O6 S

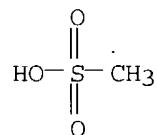
Rotation (-).



CM 2

CRN 75-75-2

CMF C H4 O3 S



RN 318987-83-6 CAPLUS

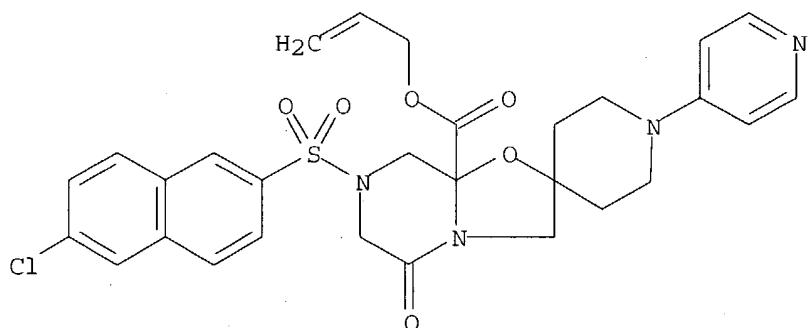
CN Spiro[8aH-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidine]-8a-carboxylic acid,  
7-[(6-chloro-2-naphthalenyl)sulfonyl]tetrahydro-5-oxo-1'-(4-pyridinyl)-,  
2-propenyl ester, (-)-, monomethanesulfonate (9CI) (CA INDEX NAME)

CM 1

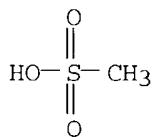
CRN 318987-77-8

CMF C29 H29 Cl N4 O6 S

Rotation (-).



CM 2

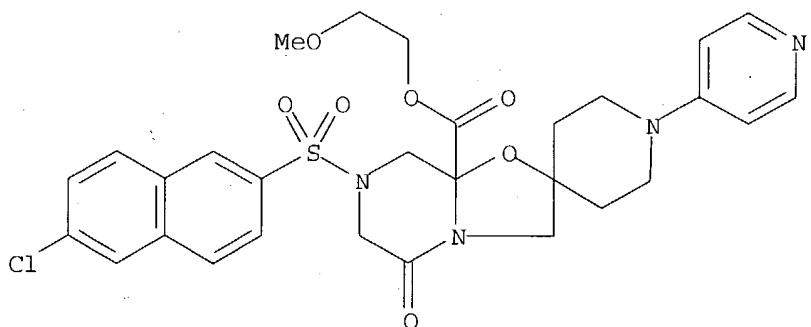
CRN 75-75-2  
CMF C H4 O3 S

RN 318987-84-7 CAPLUS  
 CN Spiro[8aH-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidine]-8a-carboxylic acid,  
 7-[(6-chloro-2-naphthalenyl)sulfonyl]tetrahydro-5-oxo-1'-(4-pyridinyl)-,  
 2-methoxyethyl ester, (-)-, monomethanesulfonate (9CI) (CA INDEX NAME)

CM 1

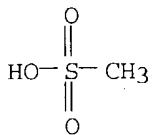
CRN 318987-78-9  
CMF C29 H31 Cl N4 O7 S

Rotation (-).



CM 2

CRN 75-75-2  
 CMF C H4 O3 S

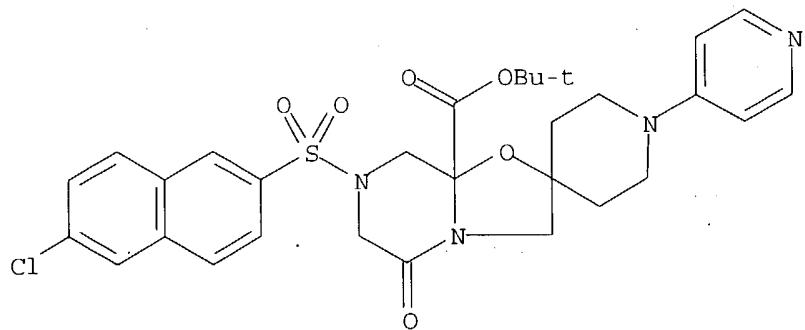


RN 318987-85-8 CAPLUS  
 CN Spiro[8aH-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidine]-8a-carboxylic acid,  
 7-[(6-chloro-2-naphthalenyl)sulfonyl]tetrahydro-5-oxo-1'-(4-pyridinyl)-,  
 1,1-dimethylethyl ester, (-)-, monomethanesulfonate (9CI) (CA INDEX NAME)

CM 1

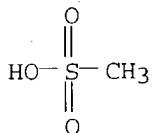
CRN 318987-79-0  
 CMF C30 H33 Cl N4 O6 S

Rotation (-).

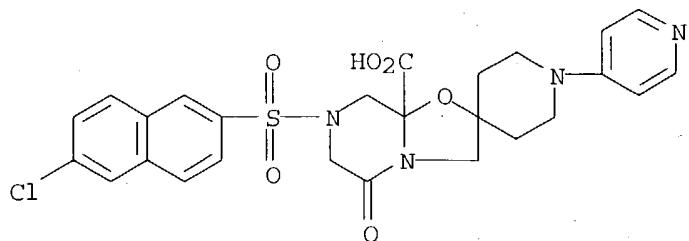


CM 2

CRN 75-75-2  
 CMF C H4 O3 S



RN 318987-86-9 CAPLUS  
 CN Spiro[8aH-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidine]-8a-carboxylic acid,  
 7-[(6-chloro-2-naphthalenyl)sulfonyl]tetrahydro-5-oxo-1'-(4-pyridinyl)-,  
 ammonium salt (9CI) (CA INDEX NAME)

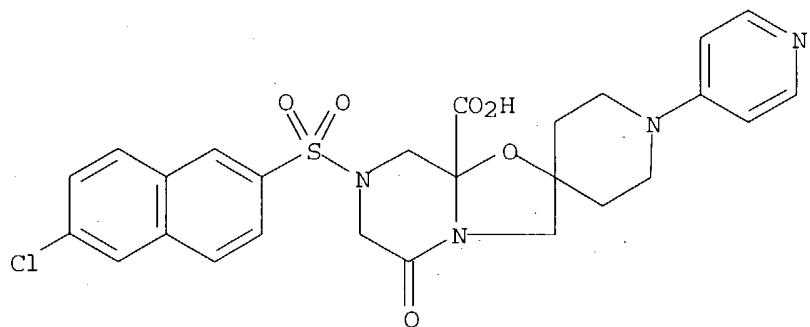


● NH<sub>3</sub>

RN 318987-87-0 CAPLUS

CN Spiro[8aH-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidine]-8a-carboxylic acid,  
7-[(6-chloro-2-naphthalenyl)sulfonyl]tetrahydro-5-oxo-1'-(4-pyridinyl)-,  
ammonium salt, (-)- (9CI) (CA INDEX NAME)

Rotation (-).

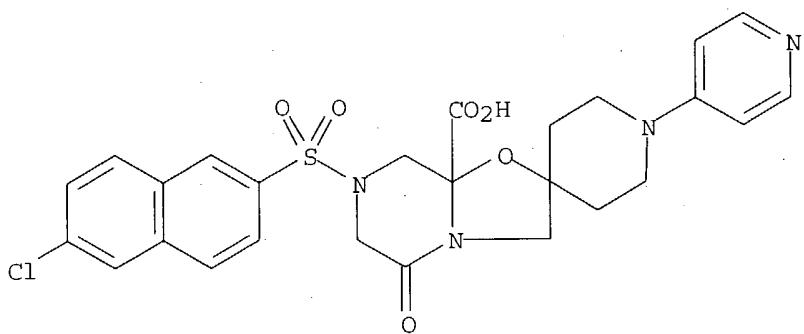


● NH<sub>3</sub>

RN 318987-88-1 CAPLUS

CN Spiro[8aH-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidine]-8a-carboxylic acid,  
7-[(6-chloro-2-naphthalenyl)sulfonyl]tetrahydro-5-oxo-1'-(4-pyridinyl)-,  
ammonium salt, (+)- (9CI) (CA INDEX NAME)

Rotation (+).



● NH<sub>3</sub>

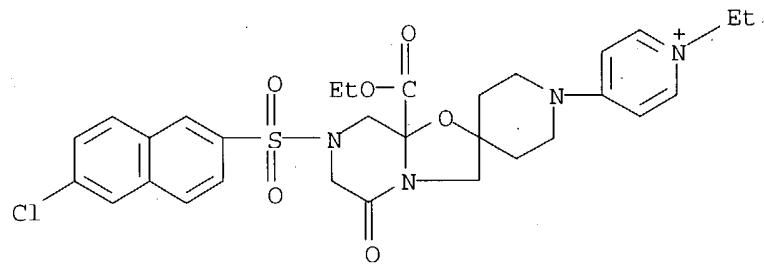
RN 318987-90-5 CAPLUS

CN Pyridinium, 4-[7-[(6-chloro-2-naphthalenyl)sulfonyl]-8a-(ethoxycarbonyl)tetrahydro-5-oxospiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-1'-yl]-1-ethyl-, salt with 4-methylbenzenesulfonic acid (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 318987-89-2

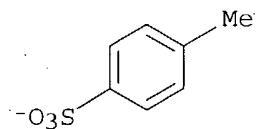
CMF C30 H34 Cl N4 O6 S



CM 2

CRN 16722-51-3

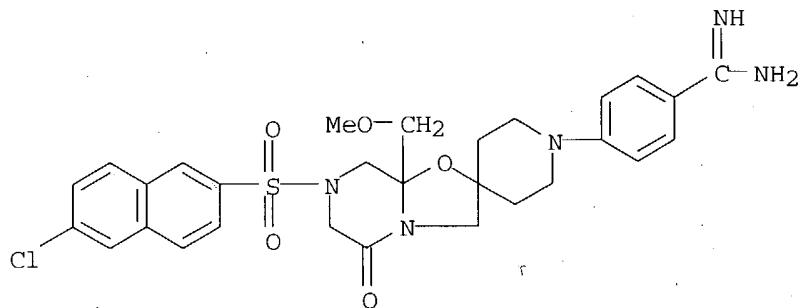
CMF C7 H7 O3 S



RN 318987-91-6 CAPLUS

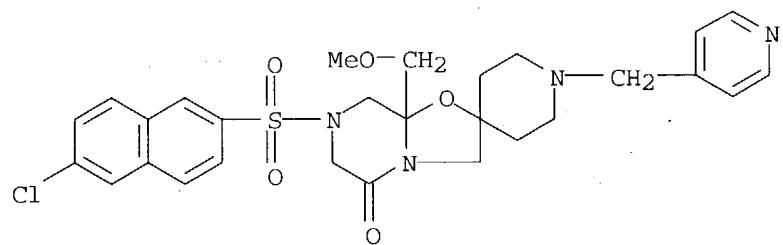
CN Benzenecarboximidamide, 4-[7-[(6-chloro-2-naphthalenyl)sulfonyl]tetrahydro-8a-(methoxymethyl)-5-oxospiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-

piperidin]-1'-yl] - (9CI) (CA INDEX NAME)



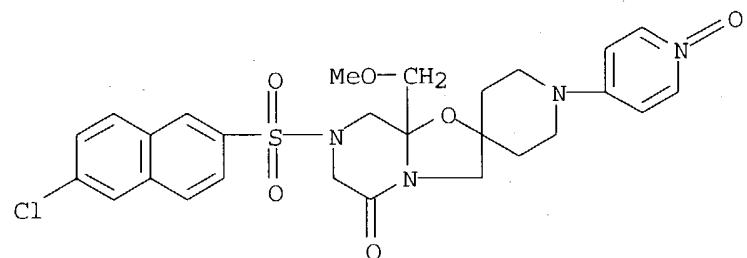
RN 318987-95-0 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
7-[(6-chloro-2-naphthalenyl)sulfonyl]tetrahydro-8a-(methoxymethyl)-1'-(4-pyridinylmethyl)] - (9CI) (CA INDEX NAME)



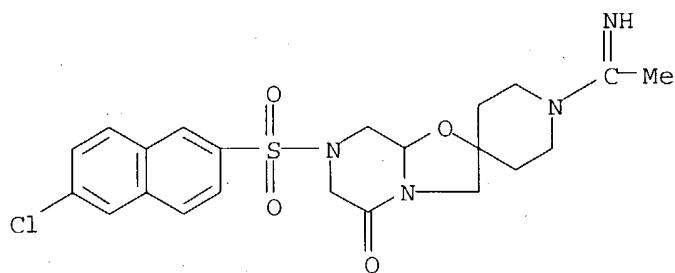
RN 318987-96-1 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
7-[(6-chloro-2-naphthalenyl)sulfonyl]tetrahydro-8a-(methoxymethyl)-1'-(1-oxido-4-pyridinyl)] - (9CI) (CA INDEX NAME)



RN 318987-97-2 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
7-[(6-chloro-2-naphthalenyl)sulfonyl]tetrahydro-1'-(1-iminoethyl)] - (9CI)  
(CA INDEX NAME)



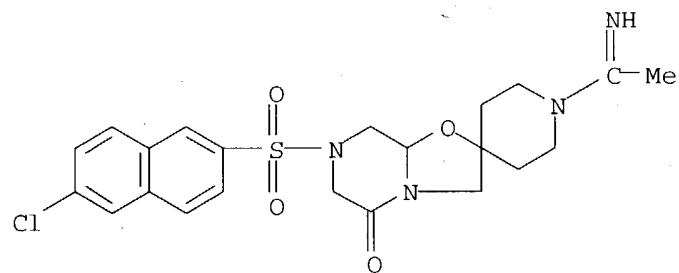
RN 318987-98-3 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
7-[(6-chloro-2-naphthalenyl)sulfonyl]tetrahydro-1'-(1-iminoethyl)-,  
monomethanesulfonate (9CI) (CA INDEX NAME)

CM 1

CRN 318987-97-2

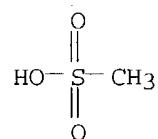
CMF C22 H25 Cl N4 O4 S



CM 2

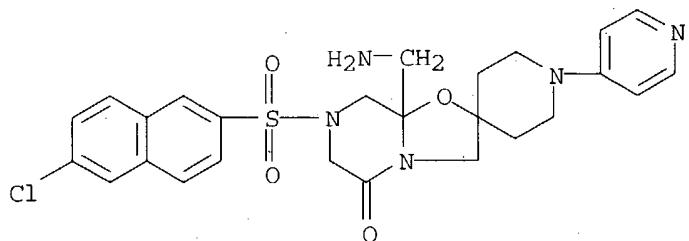
CRN 75-75-2

CMF C H4 O3 S



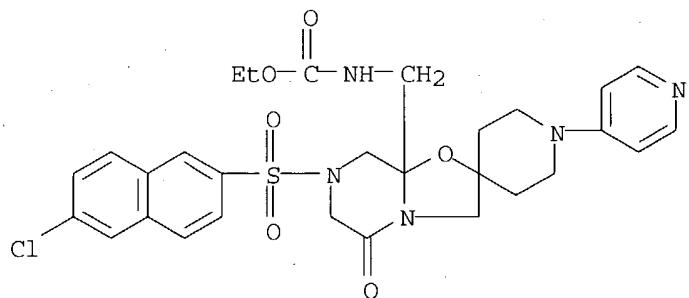
RN 318987-99-4 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
8a-(aminomethyl)-7-[(6-chloro-2-naphthalenyl)sulfonyl]tetrahydro-1'-(4-  
pyridinyl)- (9CI) (CA INDEX NAME)



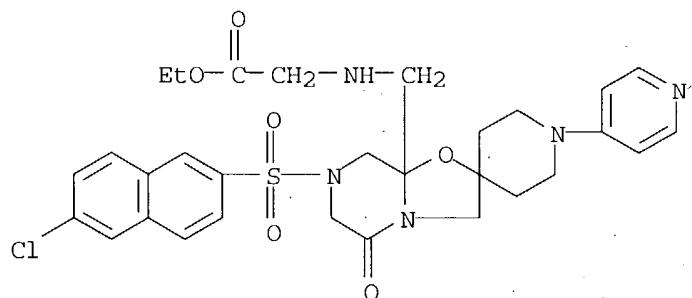
RN 318988-01-1 CAPLUS

CN Carbamic acid, [[7-[(6-chloro-2-naphthalenyl)sulfonyl]tetrahydro-5-oxo-1'-(4-pyridinyl)spiro[8aH-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-8a-yl]methyl]-, ethyl ester (9CI) (CA INDEX NAME)



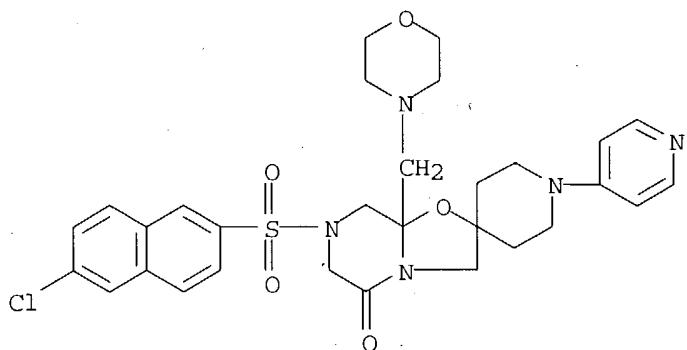
RN 318988-02-2 CAPLUS

CN Glycine, N-[[7-[(6-chloro-2-naphthalenyl)sulfonyl]tetrahydro-5-oxo-1'-(4-pyridinyl)spiro[8aH-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-8a-yl]methyl]-, ethyl ester (9CI) (CA INDEX NAME)



RN 318988-04-4 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one, 7-[(6-chloro-2-naphthalenyl)sulfonyl]tetrahydro-8a-(4-morpholinylmethyl)-1'-(4-pyridinyl)- (9CI) (CA INDEX NAME)



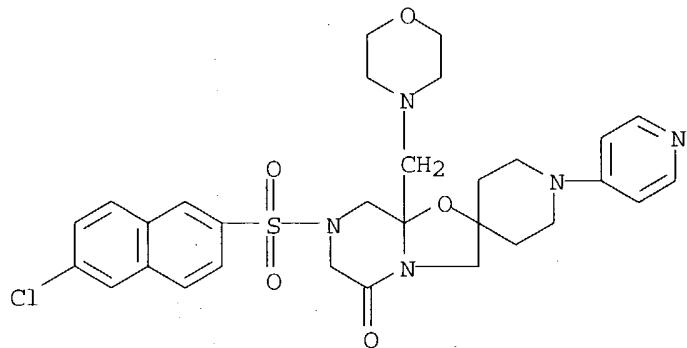
RN 318988-06-6 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
7-[(6-chloro-2-naphthalenyl)sulfonyl]tetrahydro-8a-(4-morpholinylmethyl)-  
1'-(4-pyridinyl)-, dimethanesulfonate (9CI) (CA INDEX NAME)

CM 1

CRN 318988-04-4

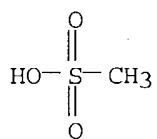
CMF C30 H34 Cl N5 O5 S



CM 2

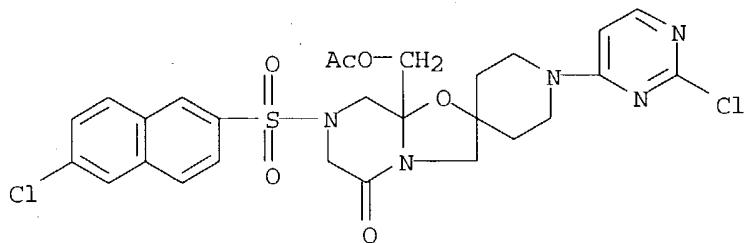
CRN 75-75-2

CMF C H4 O3 S

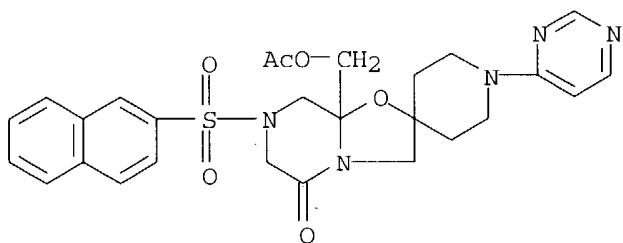


RN 318988-07-7 CAPLUS

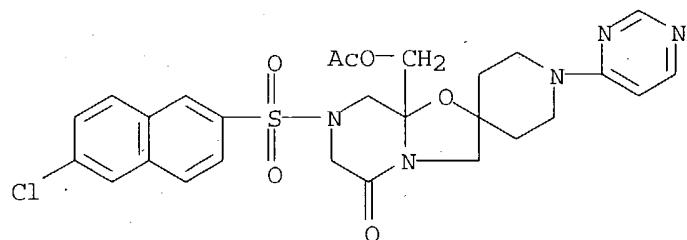
CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
8a-[(acetoxy)methyl]-7-[(6-chloro-2-naphthalenyl)sulfonyl]-1'-(2-chloro-  
4-pyrimidinyl)tetrahydro- (9CI) (CA INDEX NAME)



RN 318988-08-8 CAPLUS

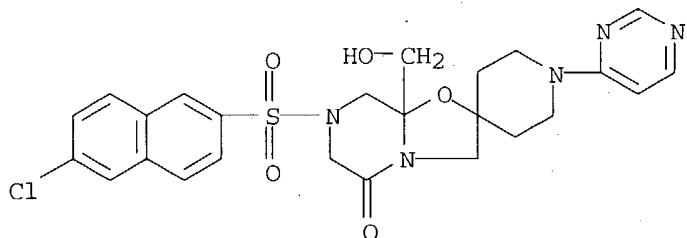
CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
8a-[(acetyloxy)methyl]tetrahydro-7-(2-naphthalenylsulfonyl)-1'-(4-pyrimidinyl)- (9CI) (CA INDEX NAME)

RN 318988-09-9 CAPLUS

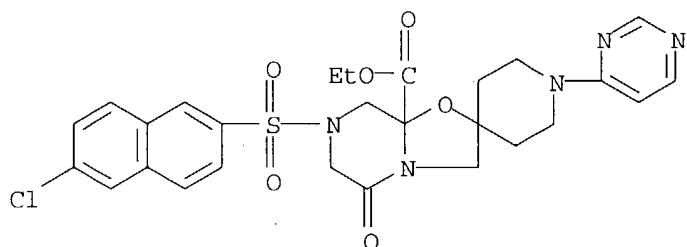
CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
8a-[(acetyloxy)methyl]-7-[(6-chloro-2-naphthalenyl)sulfonyl]tetrahydro-1'-(4-pyrimidinyl)- (9CI) (CA INDEX NAME)

RN 318988-10-2 CAPLUS

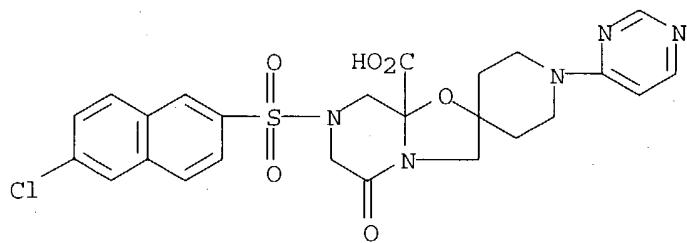
CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
7-[(6-chloro-2-naphthalenyl)sulfonyl]tetrahydro-8a-(hydroxymethyl)-1'-(4-pyrimidinyl)- (9CI) (CA INDEX NAME)



RN 318988-13-5 CAPLUS

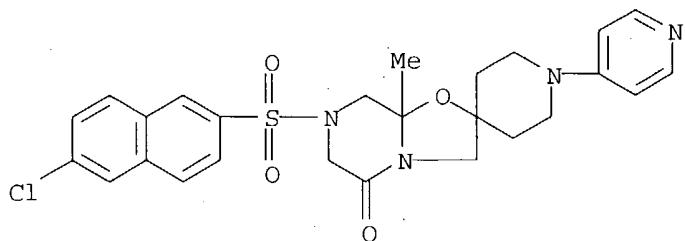
CN Spiro[8aH-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidine]-8a-carboxylic acid,  
7-[(6-chloro-2-naphthalenyl)sulfonyl]tetrahydro-5-oxo-1'-(4-pyrimidinyl)-,  
ethyl ester (9CI) (CA INDEX NAME)

RN 318988-15-7 CAPLUS

CN Spiro[8aH-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidine]-8a-carboxylic acid,  
7-[(6-chloro-2-naphthalenyl)sulfonyl]tetrahydro-5-oxo-1'-(4-pyrimidinyl)-  
(9CI) (CA INDEX NAME)

RN 318988-16-8 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
7-[(6-chloro-2-naphthalenyl)sulfonyl]tetrahydro-8a-methyl-1'-(4-pyridinyl)-  
(9CI) (CA INDEX NAME)



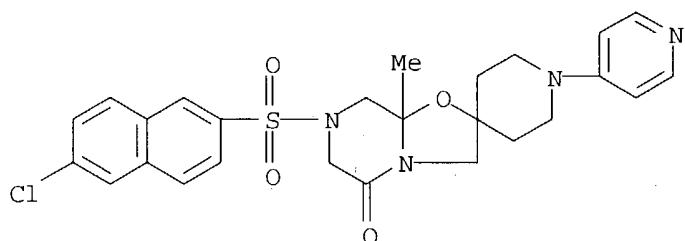
RN 318988-20-4 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
7-[(6-chloro-2-naphthalenyl)sulfonyl]tetrahydro-8a-methyl-1'-(4-pyridinyl)-  
, monomethanesulfonate (9CI) (CA INDEX NAME)

CM 1

CRN 318988-16-8

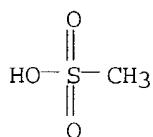
CMF C26 H27 Cl N4 O4 S



CM 2

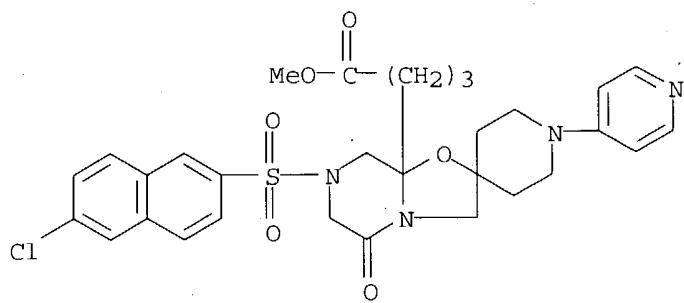
CRN 75-75-2

CMF C H4 O3 S

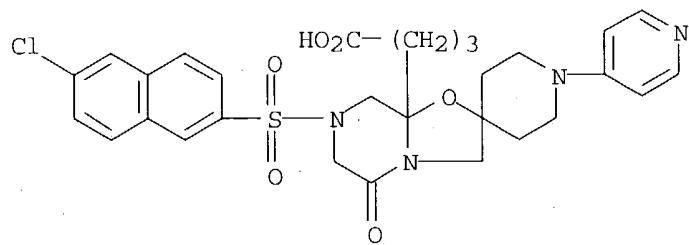


RN 318988-21-5 CAPLUS

CN Spiro[8aH-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidine]-8a-butanoic acid,  
7-[(6-chloro-2-naphthalenyl)sulfonyl]tetrahydro-5-oxo-1'-(4-pyridinyl)-  
methyl ester (9CI) (CA INDEX NAME)

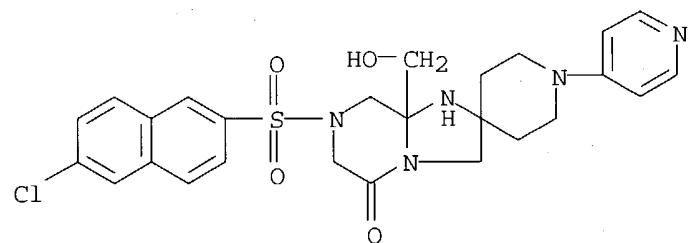


RN 318988-25-9 CAPLUS

CN Spiro[8aH-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidine]-8a-butanoic acid,  
7-[(6-chloro-2-naphthalenyl)sulfonyl]tetrahydro-5-oxo-1'-(4-pyridinyl)-  
ammonium salt (9CI) (CA INDEX NAME)

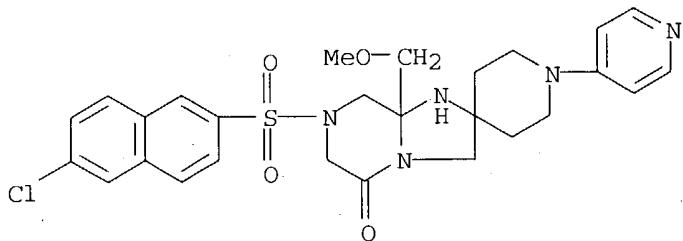
● NH3

RN 318988-26-0 CAPLUS

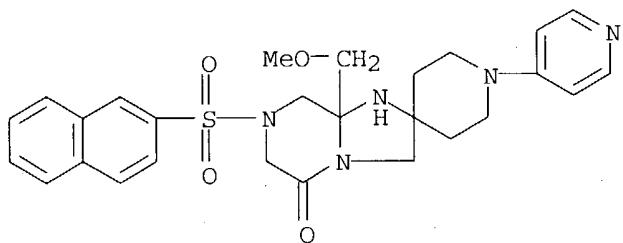
CN Spiro[imidazo[1,2-a]pyrazine-2(3H),4'-piperidin]-5(1H)-one,  
7-[(6-chloro-2-naphthalenyl)sulfonyl]tetrahydro-8a-(hydroxymethyl)-1'-(4-  
pyridinyl)- (9CI) (CA INDEX NAME)

RN 318988-32-8 CAPLUS

CN Spiro[imidazo[1,2-a]pyrazine-2(3H),4'-piperidin]-5(1H)-one,  
7-[(6-chloro-2-naphthalenyl)sulfonyl]tetrahydro-8a-(methoxymethyl)-1'-(4-  
pyridinyl)- (9CI) (CA INDEX NAME)



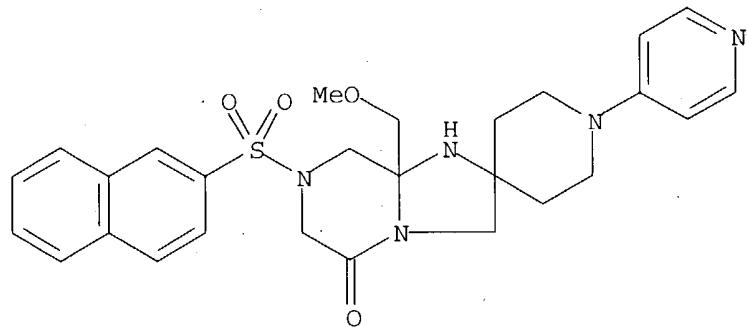
RN 318988-38-4 CAPLUS

CN Spiro[imidazo[1,2-a]pyrazine-2(3H),4'-piperidin]-5(1H)-one,  
tetrahydro-8a-(methoxymethyl)-7-(2-naphthalenylsulfonyl)-1'-(4-pyridinyl)-  
(9CI) (CA INDEX NAME)

RN 318988-40-8 CAPLUS

CN Spiro[imidazo[1,2-a]pyrazine-2(3H),4'-piperidin]-5(1H)-one,  
tetrahydro-8a-(methoxymethyl)-7-(2-naphthalenylsulfonyl)-1'-(4-pyridinyl)-  
, (+) - (9CI) (CA INDEX NAME)

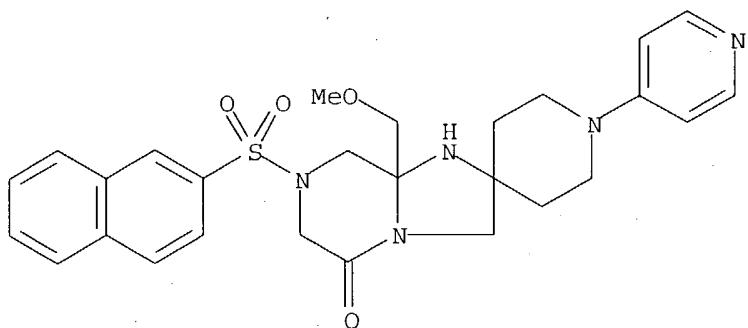
Rotation (+).



RN 318988-41-9 CAPLUS

CN Spiro[imidazo[1,2-a]pyrazine-2(3H),4'-piperidin]-5(1H)-one,  
tetrahydro-8a-(methoxymethyl)-7-(2-naphthalenylsulfonyl)-1'-(4-pyridinyl)-  
, (-) - (9CI) (CA INDEX NAME)

Rotation (-).



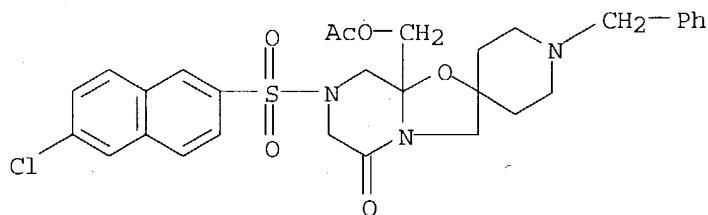
IT 318986-28-6P 318986-30-0P 318986-32-2P  
 318986-34-4P 318986-40-2P 318986-42-4P  
 318986-44-6P 318986-57-1P 318986-62-8P  
 318986-64-0P 318986-66-2P 318986-70-8P  
 318986-72-0P 318986-76-4P 318986-89-9P  
 318987-09-6P 318987-11-0P 318987-16-5P  
 318987-47-2P 318987-48-3P 318987-49-4P  
 318987-50-7P 318987-57-4P 318987-58-5P  
 318987-59-6P 318987-71-2P 318987-93-8P  
 318987-94-9P 318988-00-0P 318988-03-3P  
 318988-05-5P 318988-11-3P 318988-12-4P  
 318988-14-6P 318988-18-0P 318988-19-1P  
 318988-23-7P 318988-24-8P 318988-27-1P  
 318988-28-2P 318988-34-0P 318988-35-1P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of tricyclic compds. having spiro-piperidine as inhibitors of blood coagulation factor X (FXa) and anticoagulants or as pharmacophores in mol. designing Fxa inhibitors)

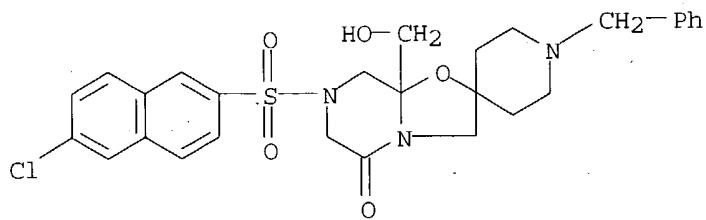
RN 318986-28-6 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
 8a-[(acetoxy)methyl]-7-[(6-chloro-2-naphthalenyl)sulfonyl]tetrahydro-1'-(phenylmethyl)- (9CI) (CA INDEX NAME)



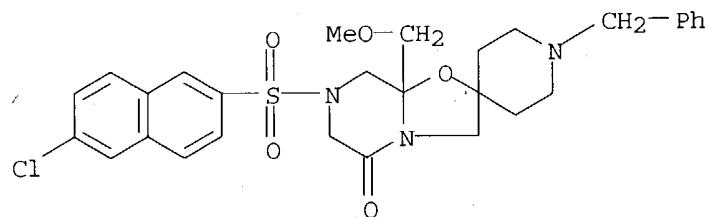
RN 318986-30-0 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
 7-[(6-chloro-2-naphthalenyl)sulfonyl]tetrahydro-8a-(hydroxymethyl)-1'-(phenylmethyl)- (9CI) (CA INDEX NAME)



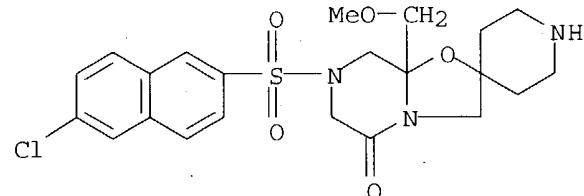
RN 318986-32-2 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
7-[(6-chloro-2-naphthalenyl)sulfonyl]tetrahydro-8a-(methoxymethyl)-1'-  
(phenylmethyl)- (9CI) (CA INDEX NAME)



RN 318986-34-4 CAPLUS

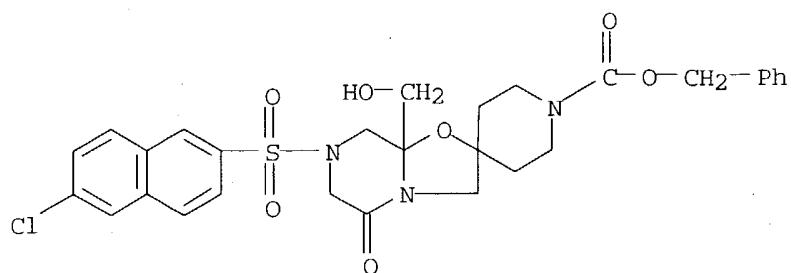
CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
7-[(6-chloro-2-naphthalenyl)sulfonyl]tetrahydro-8a-(methoxymethyl)-,  
monohydrochloride (9CI) (CA INDEX NAME)



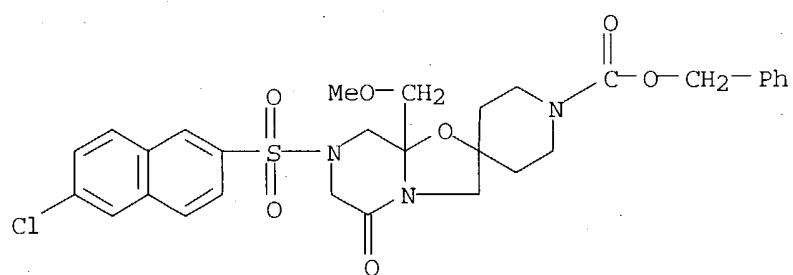
● HCl

RN 318986-40-2 CAPLUS

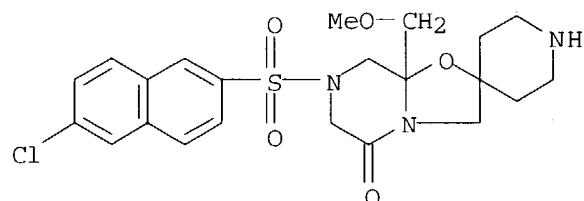
CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidine]-1'-carboxylic acid,  
7-[(6-chloro-2-naphthalenyl)sulfonyl]tetrahydro-8a-(hydroxymethyl)-5-oxo-,  
phenylmethyl ester (9CI) (CA INDEX NAME)



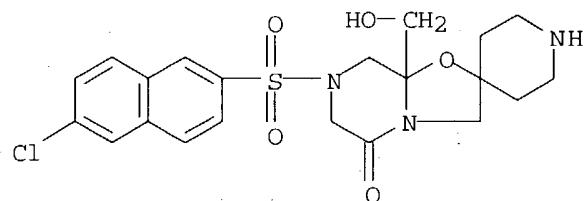
RN 318986-42-4 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidine]-1'-carboxylic acid,  
7-[(6-chloro-2-naphthalenyl)sulfonyl]tetrahydro-8a-(methoxymethyl)-5-oxo-,  
phenylmethyl ester (9CI) (CA INDEX NAME)

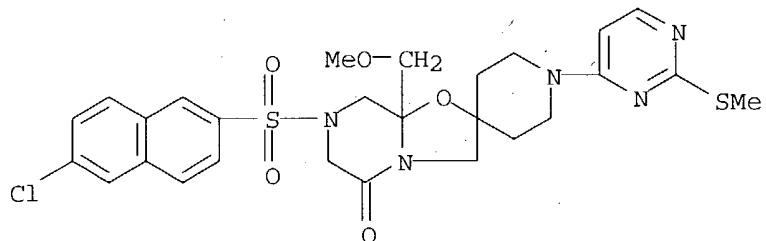
RN 318986-44-6 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
7-[(6-chloro-2-naphthalenyl)sulfonyl]tetrahydro-8a-(methoxymethyl)- (9CI)  
(CA INDEX NAME)

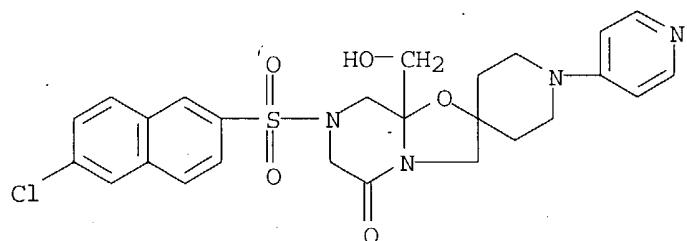
RN 318986-57-1 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
7-[(6-chloro-2-naphthalenyl)sulfonyl]tetrahydro-8a-(hydroxymethyl)- (9CI)  
(CA INDEX NAME)

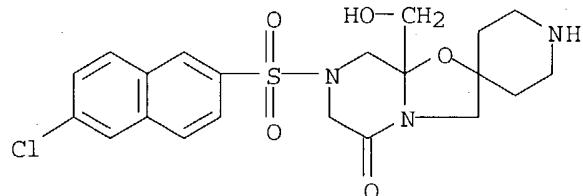
RN 318986-62-8 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
7-[(6-chloro-2-naphthalenyl)sulfonyl]tetrahydro-8a-(methoxymethyl)-1'-(2-  
(methylthio)-4-pyrimidinyl)- (9CI) (CA INDEX NAME)

RN 318986-64-0 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
7-[(6-chloro-2-naphthalenyl)sulfonyl]tetrahydro-8a-(hydroxymethyl)-1'-(4-  
pyridinyl)- (9CI) (CA INDEX NAME)

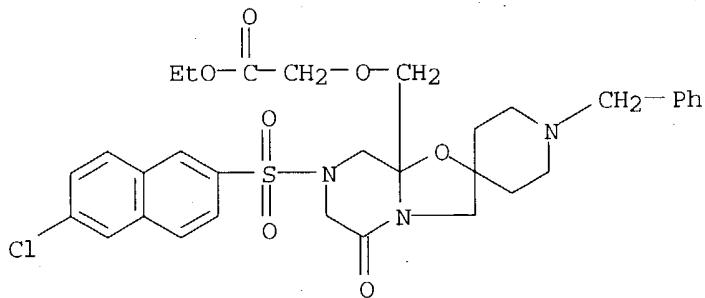
RN 318986-66-2 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
7-[(6-chloro-2-naphthalenyl)sulfonyl]tetrahydro-8a-(hydroxymethyl)-,  
monohydrochloride (9CI) (CA INDEX NAME)

● HCl

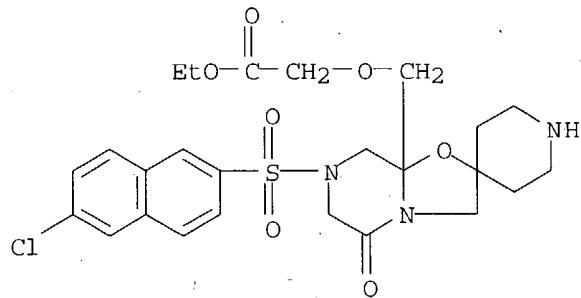
RN 318986-70-8 CAPLUS

CN Acetic acid, [[7-[(6-chloro-2-naphthalenyl)sulfonyl]tetrahydro-5-oxo-1'-  
(phenylmethyl)spiro[8aH-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-8a-  
yl]methoxy]-, ethyl ester (9CI) (CA INDEX NAME)



RN 318986-72-0 CAPLUS

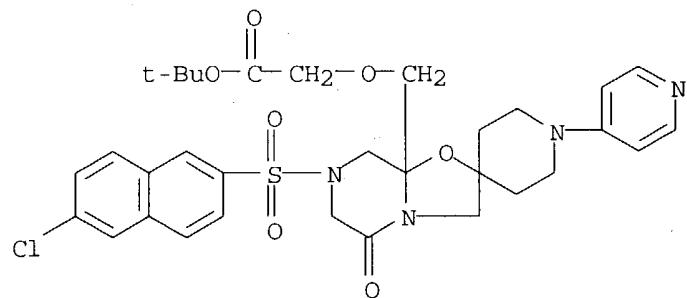
CN Acetic acid, [[7-[(6-chloro-2-naphthalenyl)sulfonyl]tetrahydro-5-oxospiro[8aH-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-8a-yl]methoxy]ethyl ester, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

RN 318986-76-4 CAPLUS

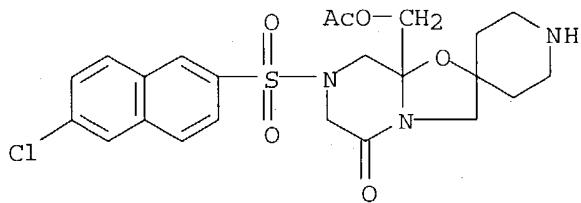
CN Acetic acid, [[7-[(6-chloro-2-naphthalenyl)sulfonyl]tetrahydro-5-oxo-1'-(4-pyridinyl)spiro[8aH-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-8a-yl]methoxy], 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



RN 318986-89-9 CAPLUS

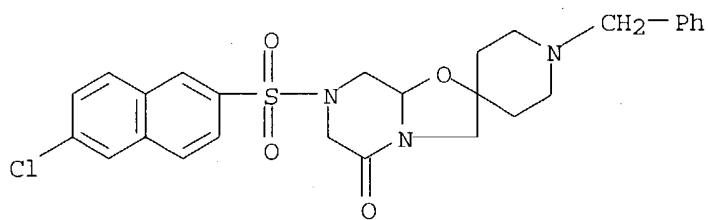
CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,

8a-[ (acetyloxy)methyl]-7-[ (6-chloro-2-naphthalenyl)sulfonyl]tetrahydro-  
(9CI) (CA INDEX NAME)



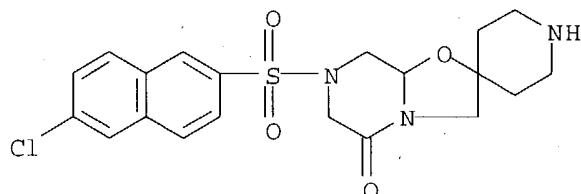
RN 318987-09-6 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
7-[ (6-chloro-2-naphthalenyl)sulfonyl]tetrahydro-1'-(phenylmethyl)- (9CI)  
(CA INDEX NAME)



RN 318987-11-0 CAPLUS

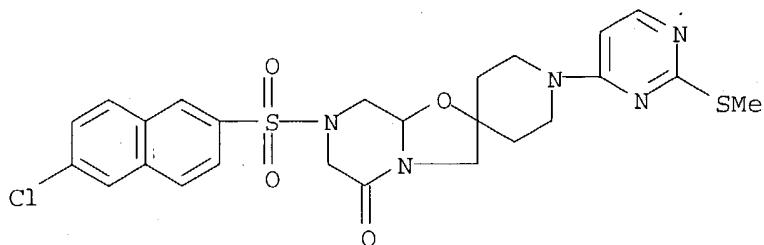
CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
7-[ (6-chloro-2-naphthalenyl)sulfonyl]tetrahydro-, monohydrochloride (9CI)  
(CA INDEX NAME)



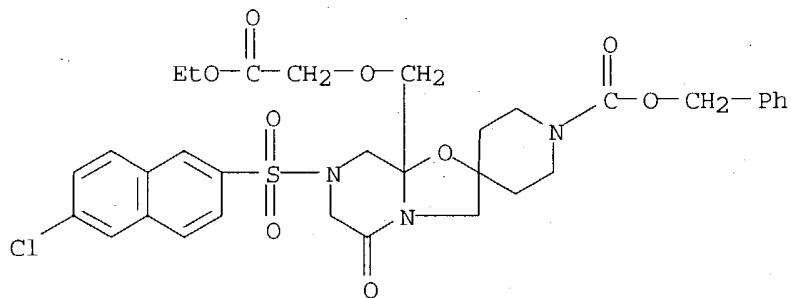
● HCl

RN 318987-16-5 CAPLUS

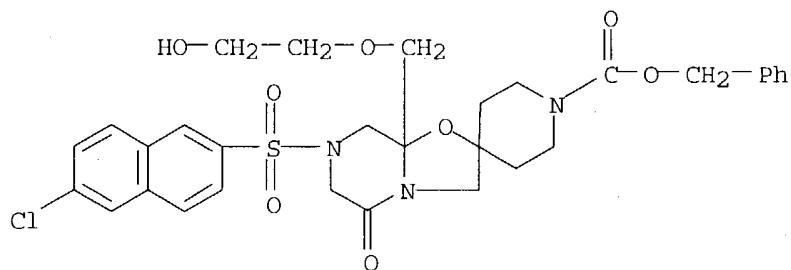
CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
7-[ (6-chloro-2-naphthalenyl)sulfonyl]tetrahydro-1'-[2-(methylthio)-4-pyrimidinyl]- (9CI) (CA INDEX NAME)



RN 318987-47-2 CAPLUS

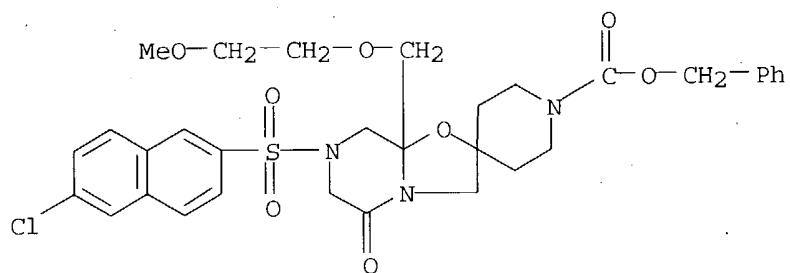
CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidine]-1'-carboxylic acid,  
7-[(6-chloro-2-naphthalenyl)sulfonyl]-8a-[(2-ethoxy-2-  
oxoethoxy)methyl]tetrahydro-5-oxo-, phenylmethyl ester (9CI) (CA INDEX  
NAME)

RN 318987-48-3 CAPLUS

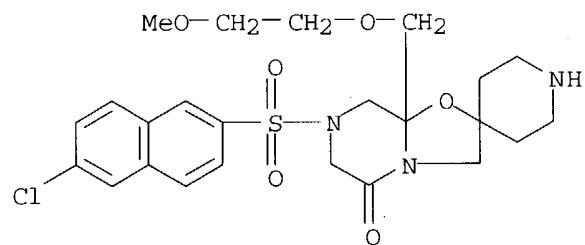
CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidine]-1'-carboxylic acid,  
7-[(6-chloro-2-naphthalenyl)sulfonyl]tetrahydro-8a-[(2-  
hydroxyethoxy)methyl]-5-oxo-, phenylmethyl ester (9CI) (CA INDEX NAME)

RN 318987-49-4 CAPLUS

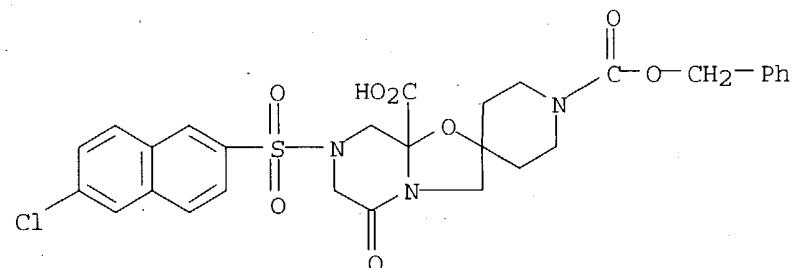
CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidine]-1'-carboxylic acid,  
7-[(6-chloro-2-naphthalenyl)sulfonyl]tetrahydro-8a-[(2-  
methoxyethoxy)methyl]-5-oxo-, phenylmethyl ester (9CI) (CA INDEX NAME)



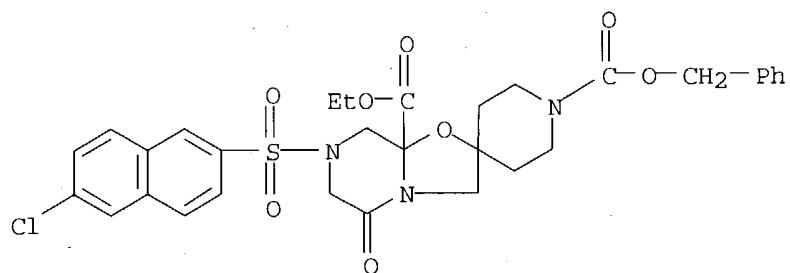
RN 318987-50-7 CAPLUS  
 CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
 7-[(6-chloro-2-naphthalenyl)sulfonyl]tetrahydro-8a-[(2-  
 methoxyethoxy)methyl]- (9CI) (CA INDEX NAME)



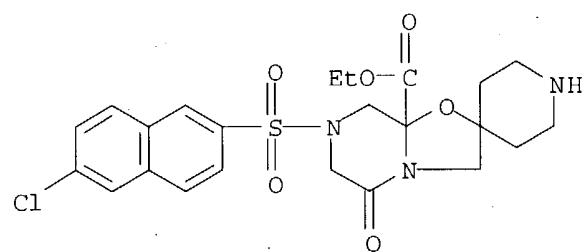
RN 318987-57-4 CAPLUS  
 CN Spiro[8aH-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidine]-1',8a-dicarboxylic  
 acid, 7-[(6-chloro-2-naphthalenyl)sulfonyl]tetrahydro-5-oxo-,  
 1'-(phenylmethyl) ester (9CI) (CA INDEX NAME)



RN 318987-58-5 CAPLUS  
 CN Spiro[8aH-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidine]-1',8a-dicarboxylic  
 acid, 7-[(6-chloro-2-naphthalenyl)sulfonyl]tetrahydro-5-oxo-, 8a-ethyl  
 1'-(phenylmethyl) ester (9CI) (CA INDEX NAME)



RN 318987-59-6 CAPLUS

CN Spiro[8aH-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidine]-8a-carboxylic acid,  
7-[(6-chloro-2-naphthalenyl)sulfonyl]tetrahydro-5-oxo-, ethyl ester (9CI)  
(CA INDEX NAME)

RN 318987-71-2 CAPLUS

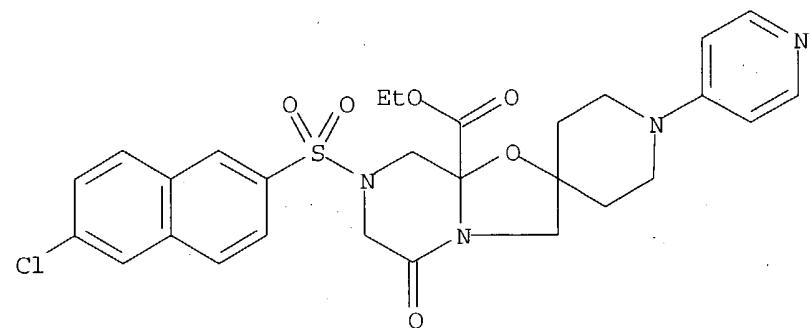
CN Butanedioic acid, 2,3-bis(benzoyloxy)-, (2R,3R)-, compd. with (-)-ethyl  
7-[(6-chloro-2-naphthalenyl)sulfonyl]tetrahydro-5-oxo-1'- (4-  
pyridinyl)spiro[8aH-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidine]-8a-  
carboxylate (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 318987-70-1

CMF C28 H29 Cl N4 O6 S

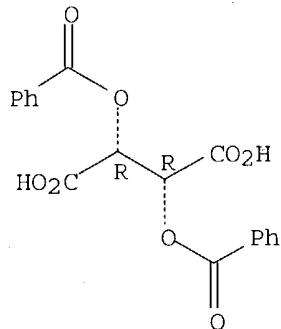
Rotation (-).



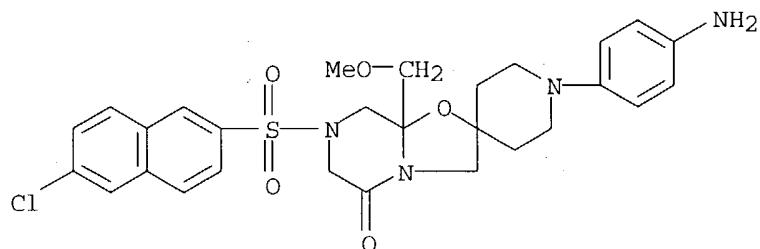
CM 2

CRN 2743-38-6  
 CMF C18 H14 O8

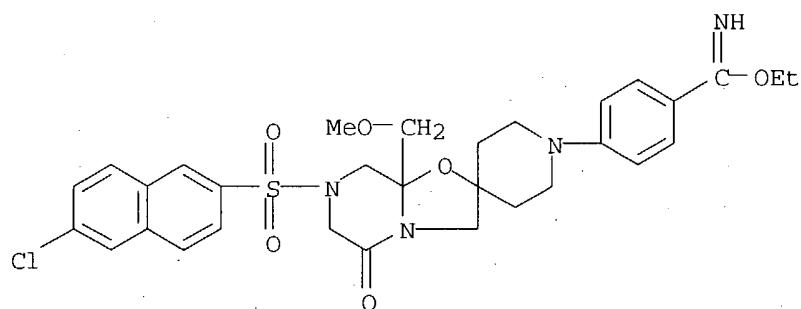
Absolute stereochemistry.



RN 318987-93-8 CAPLUS  
 CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
 1'-(4-aminophenyl)-7-[(6-chloro-2-naphthalenyl)sulfonyl]tetrahydro-8a-  
 (methoxymethyl) - (9CI) (CA INDEX NAME)

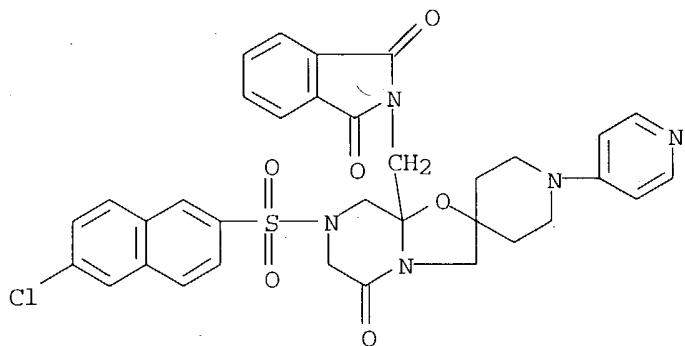


RN 318987-94-9 CAPLUS  
 CN Benzenecarboximidic acid, 4-[7-[(6-chloro-2-naphthalenyl)sulfonyl]tetrahyd-  
 ro-8a-(methoxymethyl)-5-oxospiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-  
 piperidin]-1'-yl]-, ethyl ester (9CI) (CA INDEX NAME)



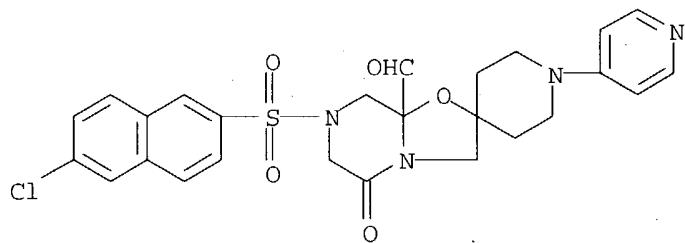
RN 318988-00-0 CAPLUS  
 CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,

7-[(6-chloro-2-naphthalenyl)sulfonyl]-8a-[(1,3-dihydro-1,3-dioxo-2H-isoindol-2-yl)methyl]tetrahydro-1'-(4-pyridinyl)- (9CI) (CA INDEX NAME)



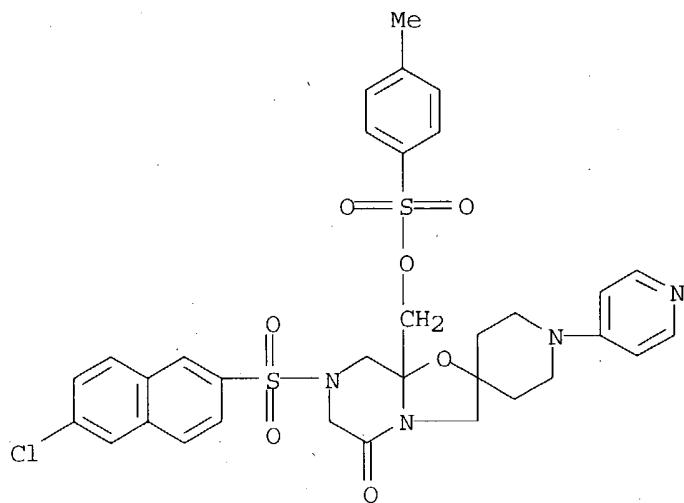
RN 318988-03-3 CAPLUS

CN Spiro[8aH-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidine]-8a-carboxaldehyde,  
7-[(6-chloro-2-naphthalenyl)sulfonyl]tetrahydro-5-oxo-1'-(4-pyridinyl)-  
(9CI) (CA INDEX NAME)

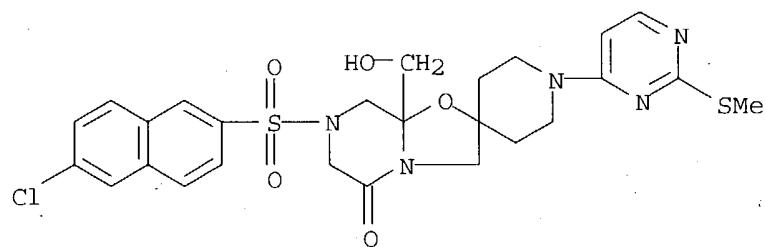


RN 318988-05-5 CAPLUS

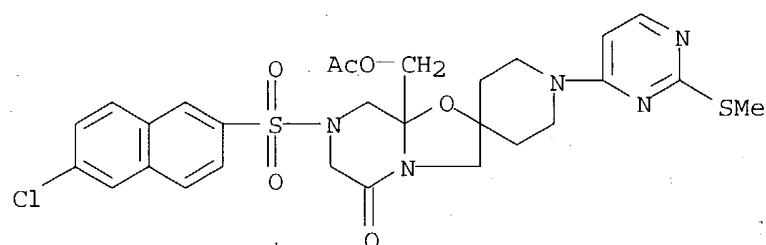
CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
7-[(6-chloro-2-naphthalenyl)sulfonyl]tetrahydro-8a-[[[(4-  
methylphenyl)sulfonyloxy]methyl]-1'-(4-pyridinyl)- (9CI) (CA INDEX NAME)



RN 318988-11-3 CAPLUS

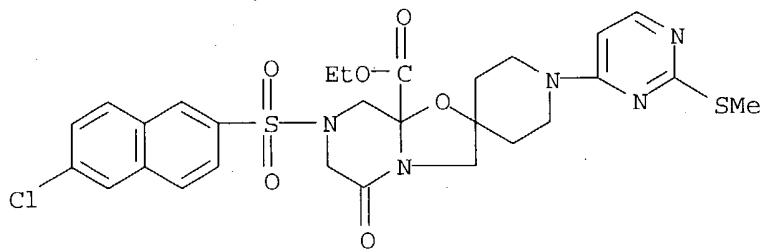
CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
7-[(6-chloro-2-naphthalenyl)sulfonyl]tetrahydro-8a-(hydroxymethyl)-1'-[2-  
(methylthio)-4-pyrimidinyl]- (9CI) (CA INDEX NAME)

RN 318988-12-4 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
8a-[(acetoxy)methyl]-7-[(6-chloro-2-naphthalenyl)sulfonyl]tetrahydro-1'-  
[2-(methylthio)-4-pyrimidinyl]- (9CI) (CA INDEX NAME)

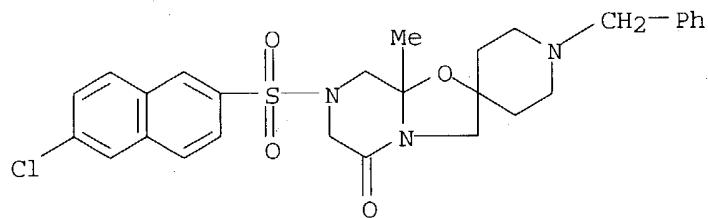
RN 318988-14-6 CAPLUS

CN Spiro[8aH-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidine]-8a-carboxylic acid,  
7-[(6-chloro-2-naphthalenyl)sulfonyl]tetrahydro-1'-[2-(methylthio)-4-  
pyrimidinyl]-5-oxo-, ethyl ester (9CI) (CA INDEX NAME)



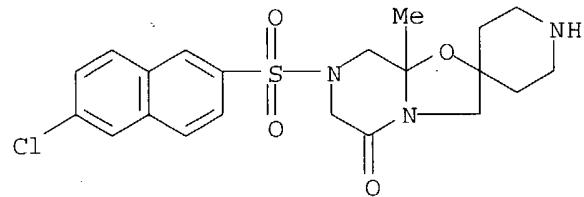
RN 318988-18-0 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
7-[(6-chloro-2-naphthalenyl)sulfonyl]tetrahydro-8a-methyl-1'-  
(phenylmethyl)- (9CI) (CA INDEX NAME)



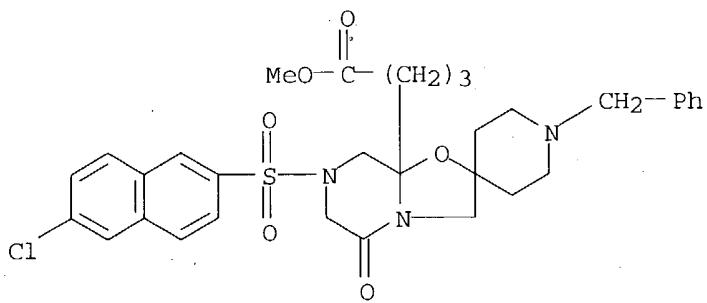
RN 318988-19-1 CAPLUS

CN Spiro[5H-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidin]-5-one,  
7-[(6-chloro-2-naphthalenyl)sulfonyl]tetrahydro-8a-methyl- (9CI) (CA  
INDEX NAME)

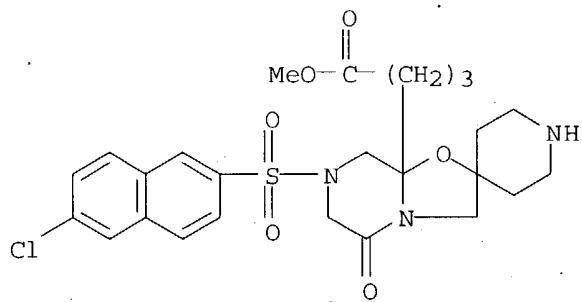


RN 318988-23-7 CAPLUS

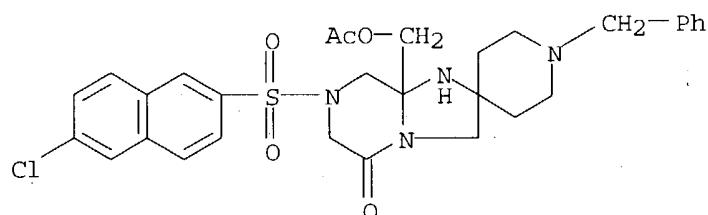
CN Spiro[8aH-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidine]-8a-butanoic acid,  
7-[(6-chloro-2-naphthalenyl)sulfonyl]tetrahydro-5-oxo-1'-(phenylmethyl)-,  
methyl ester (9CI) (CA INDEX NAME)



RN 318988-24-8 CAPLUS

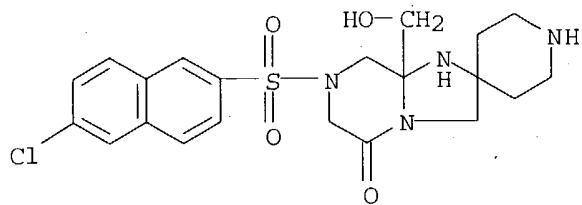
CN Spiro[8aH-oxazolo[3,2-a]pyrazine-2(3H),4'-piperidine]-8a-butanoic acid,  
7-[(6-chloro-2-naphthalenyl)sulfonyl]tetrahydro-5-oxo-, methyl ester (9CI)  
(CA INDEX NAME)

RN 318988-27-1 CAPLUS

CN Spiro[imidazo[1,2-a]pyrazine-2(3H),4'-piperidin]-5(1H)-one,  
8a-[(acetyloxy)methyl]-7-[(6-chloro-2-naphthalenyl)sulfonyl]tetrahydro-1'-  
(phenylmethyl)- (9CI) (CA INDEX NAME)

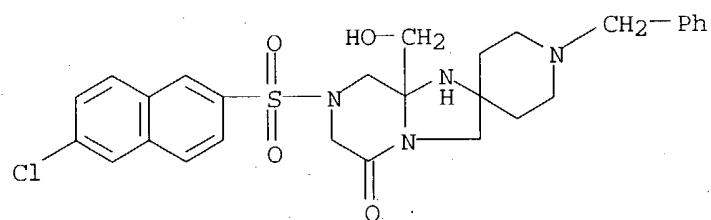
RN 318988-28-2 CAPLUS

CN Spiro[imidazo[1,2-a]pyrazine-2(3H),4'-piperidin]-5(1H)-one,  
7-[(6-chloro-2-naphthalenyl)sulfonyl]tetrahydro-8a-(hydroxymethyl)- (9CI)  
(CA INDEX NAME)



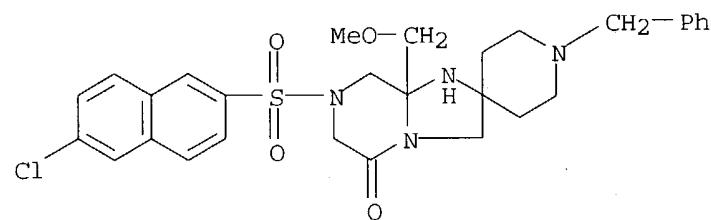
RN 318988-34-0 CAPLUS

CN Spiro[imidazo[1,2-a]pyrazine-2(3H),4'-piperidin]-5(1H)-one,  
7-[(6-chloro-2-naphthalenyl)sulfonyl]tetrahydro-8a-(hydroxymethyl)-1'-  
(phenylmethyl)- (9CI) (CA INDEX NAME)

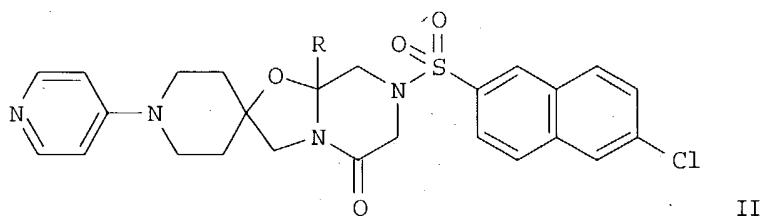
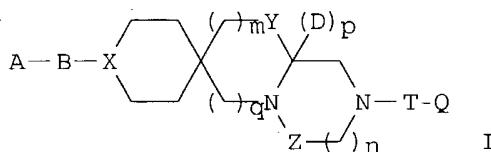


RN 318988-35-1 CAPLUS

CN Spiro[imidazo[1,2-a]pyrazine-2(3H),4'-piperidin]-5(1H)-one,  
7-[(6-chloro-2-naphthalenyl)sulfonyl]tetrahydro-8a-(methoxymethyl)-1'-  
(phenylmethyl)- (9CI) (CA INDEX NAME)



GI



AB Aromatic compds. having cyclic amino which are represented by general formula (I) or salts thereof [wherein A = H, (un)substituted (un)saturated 5- to 6-membered cyclic hydrocarbyl or heterocyclyl, (un)substituted NH<sub>2</sub>, (un)substituted imidoyl; B = single bond, CO, SO, (un)substituted C1-2 alkylene; D = H, (un)substituted CHO, (un)substituted C1-6 alkyl; X = N, (un)substituted methine; Y = O, S(O)<sub>y</sub> (wherein y = 0,1,2), (un)substituted NH; Z = CH<sub>2</sub>, CO, C(S); T = S(O)<sub>z</sub> (wherein z = 0,1,2), CO, (un)substituted C1-2 alkylene; Q = (un)substituted hydrocarbyl or heterocyclyl; m, n, q = 0, 1,2; p = 0,1; the three rings containing X, Y, or Z is optionally substituted; the bond represented by a dotted and solid line in the ring containing Z is a single bond or a double bond when p = 0] are prepared. These compds. are useful as drugs, in particular, activated blood coagulation factor X inhibitors for the prevention and treatment of diseases caused by thrombus or embolism, influenza virus infection, or periodontosis, exert a potent anticoagulation effect, and can be orally administered. A pharmacophore derived from the above compds. is also useful in mol. designing Fxa inhibitors. Thus, 4-(aminomethyl)-1-benzyl-4-hydroxypiperidine was cyclocondensed with Et 2-[N-(3-acetoxy-2-oxopropan-1-yl)-N-(6-chloronaphthalene-2-ylsulfonyl)amino]acetate under reflux in the presence of p-MeC<sub>6</sub>H<sub>4</sub>SO<sub>3</sub>H·H<sub>2</sub>O using a Dean-Stark trap to give 6-acetoxy-1,4-diaza-1'-benzyl-4-(6-chloronaphthalene-2-ylsulfonyl)-7-oxaspiro[bicyclo[4.3.0]nonan-8,4'-piperidine]-2-one which underwent saponification with a mixture of aqueous NaOH and MeOH, methylation by di-Me sulfate, and debenzylation with 1-chloroethyl chloroformate to give 1,4-diaza-4-(6-chloronaphthalene-2-ylsulfonyl)-6-(methoxymethyl)-7-oxaspiro[bicyclo[4.3.0]nonan-8,4'-piperidine]-2-one hydrochloride. The latter compound was condensed with 4-chloropyridine hydrochloride in the presence of diisopropylethylamine in 2-ethoxyethanol under reflux for 2 h to give 1,4-diaza-4-(6-chloronaphthalene-2-ylsulfonyl)-6-(methoxymethyl)-7-oxo-1'-(4-pyridyl)-spiro[bicyclo[4.3.0]nonan-8,4'-piperidine]-2-one (II; R = CH<sub>2</sub>OMe). II (R = CH<sub>2</sub>OMe) and II (R = CO<sub>2</sub>Et) showed IC<sub>50</sub> of 0.0032 and 0.0015 μM, resp., against Fxa.

RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> log Y  
COST IN U.S. DOLLARS

SINCE FILE TOTAL

10026606.1 4

Page 201

FULL ESTIMATED COST	ENTRY 22.99	SESSION 179.04
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-1.39	-1.39

STN INTERNATIONAL LOGOFF AT 10:34:52 ON 13 MAR 2004

Patel

<3/13/2004>

L Number	Hits	Search Text	DB	Time stamp
1	536	("544/358").CCIS	USPAT	2004/03/13 11:23
2	361	("544/380").CCIS	USPAT	2004/03/13 11:23
3	227	("544/384").CCIS	USPAT	2004/03/13 11:24
4	978	("514/248").CCIS	USPAT	2004/03/13 11:24
5	441	("514/245").CCIS	USPAT	2004/03/13 11:24
6	765	("514/250").CCIS	USPAT	2004/03/13 11:25
7	2731	("514/252").CCIS	USPAT	2004/03/13 11:25
8	424	("514/252.13").CCIS	USPAT	2004/03/13 11:26
9	0	((("544/358").CCIS) and. ((("544/380").CCIS) and ((("544/384").CCIS)	USPAT	2004/03/13 11:26
10	114	((("514/248").CCIS) and ((("514/245").CCIS) and ((("514/250").CCIS)	USPAT	2004/03/13 11:26
		((("514/252").CCIS)) and ((("514/252.13").CCIS))	USPAT	2004/03/13 11:26

L Number	Hits	Search Text	DB	Time stamp
1	536	("544/358").CCIS	USPAT	2004/03/13 11:23
2	361	("544/380").CCIS	USPAT	2004/03/13 11:23
3	227	("544/384").CCIS	USPAT	2004/03/13 11:24
4	978	("544/248").CCIS	USPAT	2004/03/13 11:24
5	441	("544/245").CCIS	USPAT	2004/03/13 11:24
6	765	("544/250").CCIS	USPAT	2004/03/13 11:25
7	2731	("544/252").CCIS	USPAT	2004/03/13 11:25
8	424	("544/252.13").CCIS	USPAT	2004/03/13 11:26
9	0	((("544/358").CCIS) and ((("544/380").CCIS) and ((("544/384").CCIS)	USPAT	2004/03/13 11:26
10	114	and ((("514/245").CCIS) and ((("514/250").CCIS))	USPAT	2004/03/13 11:26
11	235	((("540/543").CCIS	USPAT	2004/03/13 11:27
12	504	((("540/553").CCIS	USPAT	2004/03/13 11:28
13	149	((("540/557").CCIS	USPAT	2004/03/13 11:28
14	97	((("540/569").CCIS	USPAT	2004/03/13 11:28
15	65	((("540/570").CCIS	USPAT	2004/03/13 11:28
16	156	((("540/547").CCIS	USPAT	2004/03/13 11:29
17	2002	((("544/183").CCIS	USPAT	2004/03/13 11:29
18	161	((("514/211.01").CCIS	USPAT	2004/03/13 11:29
19	55	((("514/211.03").CCIS	USPAT	2004/03/13 11:30
20	41	((("514/211.04").CCIS	USPAT	2004/03/13 11:30
21	141	((("514/211.08").CCIS	USPAT	2004/03/13 11:30
22	0	((("540/543").CCIS) and ((("540/553").CCIS) and ((("540/557").CCIS) and	USPAT	2004/03/13 11:31
		((("540/569").CCIS) and ((("540/569").CCIS) and ((("540/570").CCIS)) and	USPAT	2004/03/13 11:31
		((("540/547").CCIS)	USPAT	2004/03/13 11:31
23	0	((("514/183").CCIS) and ((("514/211.01").CCIS) and ((("514/211.03").CCIS) and	USPAT	2004/03/13 11:33
		((("514/211.04").CCIS) and ((("514/211.08").CCIS))	USPAT	2004/03/13 11:33
398734	factor Xa and spiro		USPAT	2004/03/13 11:34
2094	factor Xa and spiro) and tricyclic		USPAT	2004/03/13 11:34
25	((factor Xa and spiro) and tricyclic) and nonan		USPAT	2004/03/13 11:34
26	((factor Xa and spiro) and tricyclic) and nonan) and one		USPAT	2004/03/13 11:34
27	((factor Xa and spiro) and tricyclic) and nonan) and one		USPAT	2004/03/13 11:39
28	spiro and decan		USPAT	2004/03/13 11:40
29	(spiro and decan) and one		USPAT	2004/03/13 11:40
30	((spiro and decan) and one) and factor Xa		USPAT	2004/03/13 11:40
31	((spiro and decan) and one) and thrombin		USPAT	2004/03/13 11:40
	1	((spiro and decan) and one) and thrombin	USPAT	2004/03/13 11:41